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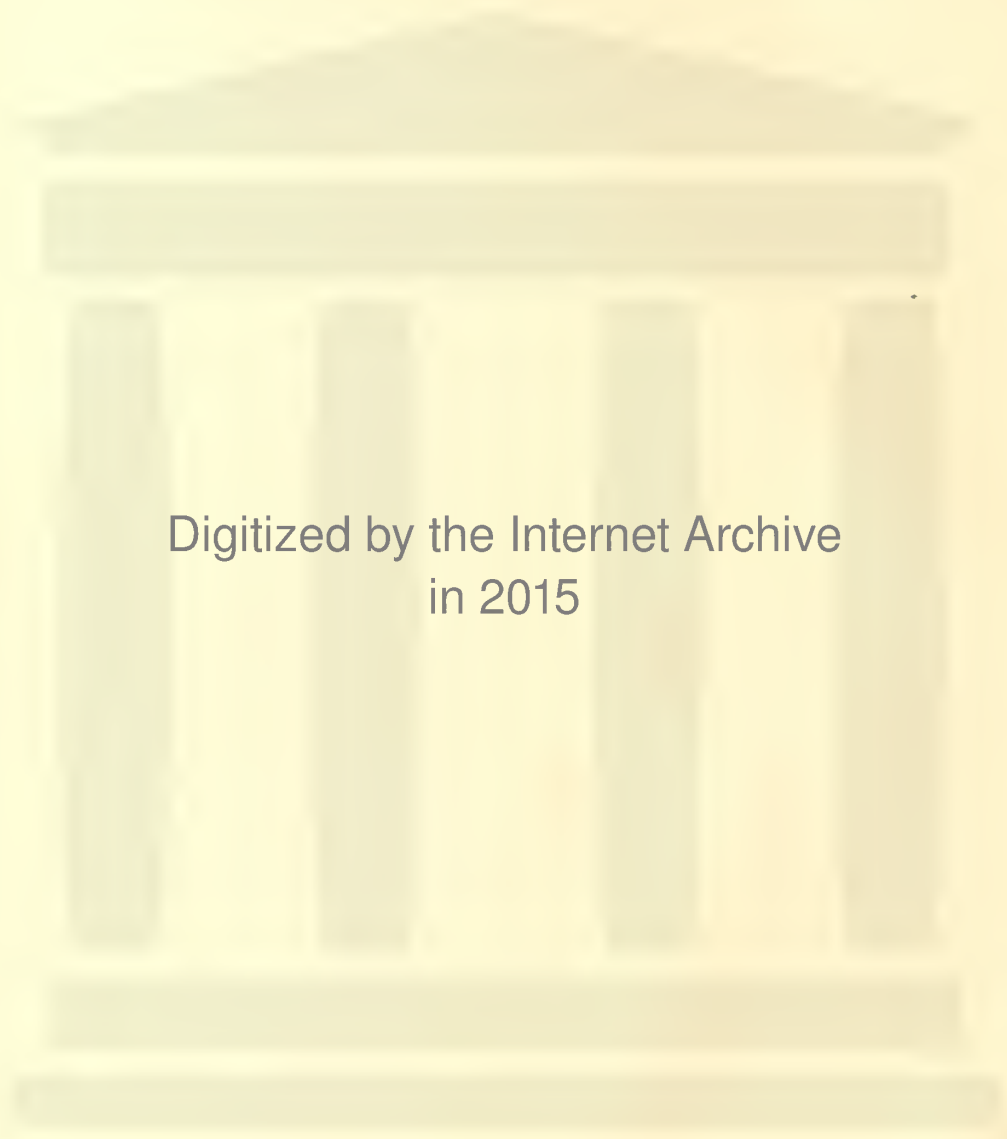












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# THE JOURNAL

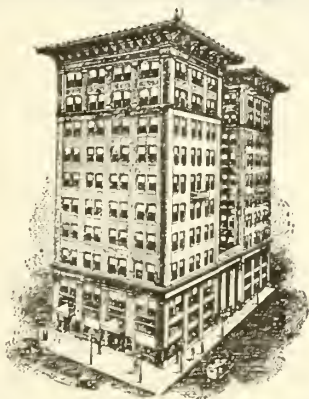
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# THE JOURNAL

OF THE

## OKLAHOMA STATE MEDICAL ASSOCIATION

VOLUME XIV

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NUMBER 1

### AN APPEAL FOR A BETTER HANDLING OF APPENDICEAL CASES.\*

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FORMERLY MAJOR, M. C., U. S. A., AND CHIEF SURGEON,  
BRITISH BASE HOSPITAL, NO. 35, CALAIS, FRANCE.

This paper has been prepared in an effort to bring about a heart to heart discussion of the above subject, more with the general practitioner and family physician, rather than the surgeon, who usually does not primarily see these cases.

To the more experienced some of my remarks may appear to be too much of a repetition of what is commonly presumed to be understood and appreciated by every well qualified practitioner of today. But a fairly wide surgical experience has led me to believe that an honest discussion can be but of benefit to all of us and go a long way toward a better handling of all forms of appendicitis.

We are not going into the differential diagnosis of appendicitis or its various stages of pathology, but our remarks will be based upon the assumption that a diagnosis of appendicitis has been made. And whether the individual case is one of simple appendicitis, or a rapid fulminating attack, with an already pus-distended appendix, or a rapidly gangrenous one due to torsion or other occlusion of the circulation.

The paramount question to be settled in either case is whether the patient should be immediately operated. Of course, in the acute fulminating type with nausea and vomiting, a rapidly rising temperature, accelerated pulse rate and abdominal distention accompanied by marked rigidity of abdominal muscles, I believe that we are all agreed that an immediate operation is imperative. Experience has taught that a patient in this condition is usually suffering severely and realizes the seriousness of his condition, and much persuasion is not necessary to induce him to submit to an immediate operation. And if in this type of cases the patient is conveniently near a hospital, he is usually operated on within a period of a few hours and usually with gratifying results.

But in the apparently milder forms, accompanied by more or less obscure or doubtful symptoms, whose severity ranges from slight abdominal distress to nausea and colicky manifestations, we are very apt to err, not so much in diagnosis, as in assuming that the case is mild in character and will probably, with a mild laxative, rest in bed, and a cessation of diet, recover in twenty-four to forty-eight hours, without any untoward complications. And it is a fact that a majority of these cases will, if medicinally treated, recover from the present attack. But who can say just how mild any case of appendicitis is going to be, or how quickly an apparently "simple catarrhal" appendix may become gangrenous or suppurate, producing a dangerous condition in a very few hours, and gravely imperiling the patient's life?

It is this class of cases of which the surgeon feels that he has not had an equal chance with the disease. For all that is left to be done in a great many of these cases is to open, drain, place in Fowler position, start a soda-drip, and trust to the patient's resistance to put up a winning fight. But unfortunately a general peritonitis is already set up in these cases when they reach the hospital. And in spite of free bi-lateral drainage and other supportive measures, this is practically the one class of cases that contribute to the death-rate of appendiceal operations.

And to me, the more surprising thing is the fact that a goodly number of these cases with diffuse peritonitis do recover.

Every surgeon is called upon to operate these cases, when, if his personal feelings were considered, he would rather the "other fellow" had the case. And invariably his most innermost thought is, Why was not this patient brought in earlier so that we might have a fair chance to save his life?

Now, as to the cause of this regrettable condition, there are two main reasons: The first one is that the patient himself does not realize the seriousness of appendicitis, and even in some cases doubts the correctness of the diagnosis—of course, a foolish thing to do, especially if he had enough confidence to call a physician in the first place—and also in a great number of cases the patient does not readily take to the idea of an operation, preferring to risk his own feelings rather than the advice of his physician.

\*Read before the Custer County Medical Society, at Clinton, Oklahoma, December 15, 1920.

And right at this point the second reason manifests itself. This time on the part of the physician who is a little easy going with his patients and allow them to lead him, even against his sounder judgment, into an "expectantly waiting attitude" and does not strongly insist on an immediate operation, especially if the attack does appear of a mild character. Only too often, saying to the patient, "Well, we will try to get you over the attack without an operation." But in a case like this the hand of procrastination and lack of authoritative firmness in insisting on carrying out immediately the mode of treatment that experience has taught us is the best and proper and the only safe and sure way is responsible for the unnecessary deaths due to appendicitis.

For some reason, unknown to me, the family physician too often yields to the whims of the patient or family and tries to get the patient by without resorting to an operation and as every surgeon knows, that, in a great majority of these cases, they are allowed too frequently to reach the suppurative stage with alarming symptoms before emphatically demanding of the patient and family that an immediate operation must be submitted to.

It is far better to remove a slightly diseased appendix with indifferent symptoms than to err on the other side, allowing the disease to go on to gangrene or rupture with a subsequent peritonitis or abscess formation followed by weeks of drainage and consequent adhesions and sometimes hernia, to say nothing of the oftentimes fatal termination.

In this connection the late Sir William Osler summed the situation up from the standpoint of the internist in the following pertinent conclusion: "It happens in practice that among any series of cases a certain number will be regarded by both the physician and surgeon as proper cases for non-operative treatment. In other instances the existence of some complication or co-incident disease of a prohibitive character may prevent operation, and finally, certain patients positively refuse operation when it is proposed. Leaving out the exceptional cases, the only safe plan in the treatment of acute appendicitis is the immediate or prompt operation." (Page 430, Osler's Modern Medicine.)

These remarks of mine do not apply to that class of cases which we all sometime see, viz: Cases where the physician is called in after three or four days illness, at which time the patient presents a distinct mass formation in right iliac region, temperature approaching normal, bowels moving normally and all signs unmistakably pointing to an absorptive process of recovery. Of course, in this latter class of cases it is wise to defer operation. But it is

the author's candid opinion that in practically all other cases an immediate operation should be insisted upon as soon as a diagnosis is made. And in some cases of a doubtful nature, when everything else has been excluded, the safe procedure, is to operate for the appendix. And you will be gratified to discover that in the great majority of cases you will find a very abnormally situated appendix that has given rise to the misleading or rather atypical symptoms.

As Chief Surgeon of a large British Base Hospital in France, I had ample opportunity of comparing the relative number of drainage cases as compared with civilian practice. And the contrast was so striking it left upon me a marked impression of the medical efficiency of the army.

In six months service in a 1500-bed hospital, we very naturally received a relatively large number of appendiceal cases, and I can recall only two cases where the appendix was ruptured. One, the case of a Naval Officer who developed the attack at sea on a small boat where operating facilities were not had, and the other was a member of a Chinese labor company who had a natural superstition of the Anglo doctor.

These cases are only referred to in order to show what might be accomplished by firmly insisting on early operation, in all cases of acute appendicitis.

If the family physician would be a little more vigorous in explaining to the patient that the only wise and safe course to pursue is to submit to an early operation where the surgical risk is practically nil in the hands of the experienced operator under favorable conditions, there would be fewer fatalities from appendicitis and the death-rate would drop to practically "zero."

One other word of caution as to the danger of administering morphin to an acute case of appendicitis. This should never be done, except in rare cases, and then only in minute doses. A good rule to adhere to, is to only administer a small amount to partially allay suffering after you have the patient on the way to the hospital and positively know that he will be operated upon within the next two or three hours.

The administering of a drastic purgative, even in a so-called mild case, is very dangerous and should never be resorted to. In mild cases where operation is impractical for any reason, medical treatment should consist of rest in bed, exclusion of all diet for forty-eight hours, soap-suds enemata to relieve lower bowel, and in some cases small doses of oil may be given to empty cecum and afford internal drainage.



Hot stupes may be applied to relieve the pain or better the ice-bag or cold towels.

But, barring complications and the lack of proper surgical facilities, always insist upon an immediate operation.

Paper discussed by Drs. McLain Rogers, Clinton; Ilorace Reed, and L. J. Moorman, Oklahoma City.

Dr. Rogers thought that it was even unwise to defer operation in that class of cases seen late where an absorptive process of recovery was seemingly taking place.

Dr. Reed stated that he would strongly advise against administering even a small dose of oil, even in those mild cases where operation was refused. Comparing this practice to the discharge of a 22-calibre rifle in a dark room filled with people. Stating that when the lights were turned on and revealed no one injured we all felt good, but what a chance was taken!

In closing, Dr. McGregor stated in replying to Dr. Rogers, that he only advocated deferring operation in those localized cases where an absorptive process was evidently taking place, and then, only when the patient was in the hospital where constant observation could be obtained. But he believed where these conditions could be fulfilled it was better to defer the immediate operation until you could have a reasonable hope of going in and removing the appendix without spreading the infection. In answering Dr. Reed's criticism, he stated that as a routine, in cases who positively refused operation, he, too, would strongly advise against the employment of any cathartic, but there were certain cases in which the appendiceal condition was aggravated by an impaction of the cecum that could not be relieved by enemata, but would respond more quickly if a small cautious dose of oil was given. But even this treatment should not be resorted to if a consent to an operation could possibly be procured.

**A Council on Pharmacy and Chemistry for the Netherlands.** The minister of labor of the Netherlands officially inaugurated, on September 1, the government Institute voor Pharmaco-Therapeutisch Onderzoek, which seems to be modeled after the Council on Pharmacy and Chemistry of the American Medical Association. The minister of labor remarked in his opening address that the Netherlands has had a permanent pharmacopoeia commission since 1899. But this does not attempt to keep pace with the flood of new remedies, and the government has finally heeded the appeals of the Netherlands Medical Association and the Pharmaceutical Association and has founded this institute. The Council on Pharmacy and Chemistry of the Netherlands is to have the support and backing of the government; the Council on Pharmacy and Chemistry of the American Medical Association has only the backing of the medical profession (*Jour. A. M. A.*, Nov. 6, 1920, p. 1279).

## THE ACUTE ABDOMEN IN INFANCY AND CHILDHOOD.\*

GREGORY A. WALL, M. D.

TULSA, OKLAHOMA

The term "Acute Abdomen" was first used by Battle<sup>1</sup> in a series of lectures delivered at St. Thomas Hospital (London), in 1910, and in this country the term has been popularized by Deaver, who has written extensively under this term. The importance of the subject, with the improved results that are met with when sufferers from most of the catastrophes included in the scope of this condition, are submitted to the proper remedial measures, has induced me to write this paper. The acute abdomen may be defined as one in which some grave catastrophe has taken place, by reason of some acute pathological condition involving any one of the abdominal viscera; in other words, this condition is only the warning sign, by which we know that the peritoneal cavity is being invaded by some grave infection, or some abnormal interference with the physiological action of the peritoneal contents. We have it in conjunction with gastric, pancreatic, splenic, intestinal and gall-bladder lesions, as well as from lesions of the pelvic organs. Among the many conditions causing it might be mentioned, perforating gastric or duodenal ulcer, acute cholecystitis, acute pancreatitis, and splenitis. Among the intestinal lesions may be mentioned acute obstruction, volvulus, intussusception and diverticulitis, leaving for the last our most frequent offender, the appendix. In pelvic conditions the most frequent causes will be found in ovarian cyst with twisted pedicle, tubal pregnancy and acute salpingitis. Urinary bladder lesions do not often cause it unless there is some traumatism with rupture and extravasation. The symptoms of the acute abdomen are the symptoms which follow any of the various lesions above enumerated. In infancy and childhood, the essayist is of the opinion that there are but two lesions which should be given first consideration, viz: Intussusception and acute appendicitis, and of these two, intussusception should be thought of first if the child is under ten years of age, since it constitutes 16% of cases of acute abdomen during these years. At St. Thomas Hospital the statistics show that out of 593 cases, 134 were under 12 months of age. The diagnosis should be made early, for during the first 36 hours the plastic exudate has not glued the bowel together, the obstruction has not as yet become complete and the invagination may

<sup>1</sup>W. H. Battle; Clin. Lectures on The Acute Abdomen, 1910

\*Read in Section on Pediatrics and Obstetrics, Annual Meeting, Oklahoma City, May, 1920.

easily be reduced, and the death rate should be nil in the hands of any experienced surgeon. But after this time has elapsed the intussusceptum and the intussusciptens will have become firmly glued together by plastic exudate, the circulation will have been more or less completely arrested and the vitality of the gut will be such that resection may become necessary, and resection in young children is a very serious operation. Even though resection may not be indicated, some operative procedure will in all probability be required to relieve the condition after this length of time has elapsed.

The diagnosis is easily made, if we are at all conversant with the clinical phenomena accompanying the condition, knowing as we do, that the affection is one of early childhood, and that it develops with great suddenness in the midst of perfect health. In the early stages the bowel is not completely occluded and the constriction is not immediately devitalizing, hence there is usually tenesmus and straining and frequently repeated passages of bloody mucous, with small particles of fecal matter. At this time there is little or no shock, no vomiting and no meteorism. The most frequent complaint is colicky pain with remissions of minutes or hours, and if the abdomen is carefully observed, exaggerated peristalsis will be seen and palpation will give evidence of a tumor, soft in consistency and non-painful, over the intestine involved. The differential diagnosis from gastro-enteritis or ileo-colitis should be made without trouble, by taking a careful history and from the symptomatology accompanying these diseases.

The following case is typical and illustrates the value of an early diagnosis:

M. S., seen July 29 1919. Female aged six years, well developed and in good nutrition. Child was in perfect health until the day before, when she was suddenly taken ill with a severe pain in the abdomen. She did not vomit, there was no nausea, and she did not seem very ill. The case was seen on the afternoon of this day by Dr. Laws, who found that the child had had no bowel movements since the beginning of the attack, and had passed no flatus. The child at this time, 24 hours after the onset, was having severe colicky pains in the abdomen, at intervals of several minutes, with frequent attempts at stool and distressing tenesmus, but only blood and mucous passed from the bowel. The temperature at this time was 99, and the pulse 110. About this time the patient began to vomit a yellowish green vomitus. Upon examination, Dr. Laws observed an exaggerated peristalsis, and found a lump in the left lumbar region, soft in consistency and not tender. He pronounced the case one of intussusception and recommended immediate operation. The case

was brought to the hospital and preparations made for immediate laparotomy. At this time the abdomen was becoming rigid, peristalsis was marked, and a mass could be felt in the left lumbar region about as large as a small orange. Rectal examination was deemed unnecessary. Temperature 99, pulse 110. The child was given an enema of soap suds and 1-16 grain of morphin was given thirty minutes before the operation. Ether was administered and a left paramedian incision was made. On opening the abdomen and passing the hand down to the mass it was easily raised up and was found to be a colic intussusception, the transverse colon invaginating itself into the descending colon. It was easily reduced, no adhesions having taken place as yet, and the vitality of the gut was normal. About six inches of the gut was invaginated, and after reduction the mesentery was shortened, the abdomen was closed in layers and the patient left the table in splendid condition, the operation time being only fifteen minutes. The patient had a fair night, the bowels moving every three or four hours, but there was no more blood, the movements being liquid with a goodly amount of solid fecal matter. The temperature at this time was 102 and the pulse 118. Two days following the operation the temperature and pulse were normal and the child went on to an uninterrupted recovery.

This case illustrates very aptly that trite saying of Deavers,<sup>2</sup> "That the acute abdomen is a condition calling for careful judgment and thoughtful consideration is obvious; that it occupies too prominent a place in the mortality statistics is unfortunately too true."

#### Appendicitis.

While this disease is rare in infancy, it occurs more frequently than we suspect. I have somewhere in my literature the report of a case in a six weeks old baby who was successfully operated upon. Just a few weeks ago one of my colleagues was called upon to operate for acute appendicitis in a child four years of age. Fortunately, the diagnosis in the case was made before rupture and the child made a good recovery. This is a most serious disease in childhood because of the anatomical fact that the omentum in the child is small and not fully developed, hence, does not afford any protection to the general peritoneal cavity during the attack, and as result a diffuse peritonitis promptly ensues following the rupture, unless by good luck the appendix is retrocecal (and this is not often the case in childhood), in which instance the abscess may localize and thereby become walled off from the general peritoneal cavity. Confusion between the early stages of

<sup>2</sup>S., G. & O., Jan., 1920, page 30.

pneumonia and appendicitis is not so uncommon and should be thought of, and this is especially true of pneumonia of the right lower lobe. This condition can, by irritating the 10th, 11th, and 12th dorsal nerves, produce pain and rigidity and tenderness in the right lower quadrant of the abdomen, which accompanied by leucocytosis and vomiting, may closely simulate an attack of acute appendicitis. A carefully made examination of the chest, taking into consideration the temperature, pulse and respirations, will usually solve the riddle, remembering that appendicitis in the very young is the exception and pneumonia the rule. The important thing in these cases is to *think* of the possibility of pneumonia giving rise to the symptoms in question. Since we are brought to a realization of the gravity of the acute abdomen in infancy and childhood, it well behooves the physician who sees these cases first to be well versed in differential diagnosis. Too many of these little patients are not given a careful examination and a snapshot diagnosis of indigestion or stomach trouble is made and the patient given a purgative. This is usually the very worst thing to do. If it is an attack of appendicitis, the purgative will generally change it from an acute catarrhal one to a suppurative one with subsequent rupture, followed very promptly by a diffuse peritonitis and fatal ending. If the case be one of intussusception, the increased peristalsis will only invaginate the gut all the more and hasten strangulation, with its resultant complete obstruction and gangrene, thereby changing a curable case into a probably fatal one. On this point, Deaver<sup>3</sup> says: "The greatest toll in lives is exacted from delay in diagnosis and instituting proper treatment. The physician should be cognizant of the real issue and sufficiently resourceful not to be forced into doing something which will endanger the certainty of the diagnosis, or unfavorably influence the course of the disease, i. e., by giving a purgative. Mothers and all who use the family medicine chest must be made to realize the danger of using a purge in acute abdominal conditions."

The acute abdomen is important for the reason that most cases are surgical from the onset and delay means disaster, and only by early recognition and early operation can the mortality be lowered. Why wait in these cases when we all know that exploratory operations done by competent surgeons should have a recovery of 100%? The only way to avoid error is to elicit a careful clinical history and then be able to interpret it correctly. The writer is constrained to say, that too many men go about hunting for some obscure and rare condition, instead of thinking about the commoner ones.

Again, too much stress is laid upon the laboratory findings thereby losing valuable time waiting for reports, which will in these conditions avail you nothing. Acute abdominal conditions usually demand early surgical interference, and the laboratory findings will seldom alter the course of the competent surgeon and internist. The only way to diagnose many of these cases positively is to look into the abdomen, when we know that simple exploratory operation should have no mortality. There is no excuse for hesitation, when we know that delay means a fatality and operation means nearly always a cure. In chronic conditions the case is different; here we have plenty of time and proper laboratory tests are very essential in order to arrive at a more nearly correct diagnosis, but negative findings should not take precedence over a carefully interpreted clinical history. The author sometimes wonders how many men are conversant enough with the laboratory report to be able to draw any valuable conclusions therefrom. To be of any value these tests should be more completely made than they usually are. We often see requests for the absolute count only; this is of no value in diagnosis, since it gives you no special information. It may be very high and not a bit of pus be present. I have seen an absolute count of 30,000 in a case of ruptured tubal pregnancy, from loss of blood. The only count which is at all of value is the complete count. Hewitt<sup>4</sup> very aptly draws the following conclusions as to the relative value of the blood count in disease:

1. The absolute count when taken alone is of questionable value.
2. The polynuclear count alone is in most instances a relative index of the diagnosis.
3. The correlated absolute and polynuclear are of greater value than of either count taken alone, especially as regards prognosis.

A high absolute count (35000) with a high polynuclear (95%) usually means a good prognosis.

A high absolute count (30000) with a moderately high polynuclear (80%) means a very good prognosis.

A low absolute (7000) with a high polynuclear (95%) indicates a grave prognosis.

A low absolute (7000) with a low polynuclear (65%) usually indicates no infection, or if infection be present, it is so mild that it does not stimulate the resisting powers of the body sufficiently to produce a leucocytosis.

Catarrhal cases, fulminating or moribund cases and walled-off abscesses, frequently do not stimulate leucocytosis.

<sup>3</sup>Op. Cit.

<sup>4</sup>Annals of Surgery, 1917, page 143



### Conclusions.

1. That the acute abdomen in infancy and childhood usually means intussusception or appendicitis.

2. That the family physician does not give the condition enough thought and consideration and jumps at conclusions too quickly.

3. That early surgical interference is the only logical treatment for these conditions, and this can only be given by virtue of an early diagnosis.

4. That purgation should never be done until the diagnosis has been made, but in lieu of this, enemas should be given, since they are harmless and just as valuable.

5. That too much time is often wasted on laboratory tests in acute abdominal conditions, since they are of little value in arriving at a proper decision in this class of cases.

6. That in all cases where the diagnosis is in doubt, and the condition does not improve very promptly, an exploratory operation should be done, since in competent hands this is not dangerous.

7. That physicians should acquaint themselves more thoroughly with the clinical symptoms of the acute abdomen in infancy and childhood, by this means giving their patients the benefit of the proper remedial measures at the earliest possible moment.

720 Mayo Building.

**Some Misbranded Venerea! Nostrums.** The following preparations have been the subject of prosecution by the federal authorities under the Food and Drugs Act on the ground that the therapeutic claims which were made for them were false and fraudulent: Injection Cadet (E. Fougere and Co., New York), a dilute watery solution of copper sulphate and unidentified plant material. Knoxit Injection (Beggs Manufacturing Co., Chicago), a solution of zinc acetate with alkaloids of hydrastis, in glycerin and water. Knoxit Liquid, a solution of zinc acetate with alkaloids of hydrastis, in glycerin and water. Knoxit Globules, essentially a mixture of volatile and fixed oils and oleoresins, including copaiba balsam, cinnamon and cassia. Grimault's Injection (E. Fougere and Co., New York), a weak watery solution of copper sulphate and plant extractives, probably inatico. Halz Injection (Edw. Price Chemical Co., Kansas City, Mo.), consisting essentially of zinc sulphate, boric acid, glycerin, traces of alum and formaldehyd and water. Tablets which seem to go with the product consisted essentially of calcium and magnesium carbonates, copaiba, a laxative plant drug, plant extractives, a small amount of an unidentified alkaloid, sugar and starch. Noxit (Frederick F. Ingram Co., Detroit), consisting essentially of opium, berberine, a zinc salt, glycerin, alcohol and water. Crossmann Mixture (Wright's Indian Vegetable Pill Co., New York City), essentially an alcoholic solution of volatile oils, including balsam copaiba and cubebs. Santal-Pearls (S. Pfeiffer Mfg. Co., St. Louis, Mo.), consisting essentially of a cinnamon-flavored mixture of santal oil and copaiba. Cu-Co-Ba-Tarrant (Tarrant Co., New York City), consisting essentially of a mixture of extract of cubebs and copaiba with magnesium oxid. Hygienic and Preservative Brou's Injection (E. Fougere and Co.), consisting essentially of acetates and sulphates of zinc and lead, morphin, water and a very small amount of alcohol (Jour. A. M. A., Sept. 25, 1920, p. 891).

### THE CONVALESCENT PERIOD OF THE PUERPERIUM.\*

JOHN PAINE TORREY, M. D.  
BARTLESVILLE, OKLAHOMA

† You will probably agree with me that the minor complications, so frequently met after child birth, have proved not only annoying but even a serious menace to the convalescent mother. While the infant may also begin at once to share the ills to which flesh is heir.

Since in all obstetric problems we have two patients under our care, I will first invite your attention to those *maternal* ailments which have attracted my thought, and *retained placenta* while forming a complication of labor itself, is yet, with uterine hemorrhage, one of the first conditions after the birth of a child which may give us trouble.

If pituitary extract has been given ante partem, one seldom has delay in placental delivery, and by Crede of the fundus one can soon find out whether the placenta is going to give way readily or not. I believe I am right in saying that it is reasonably safe now to give pituitary extract and expect an early delivery of the placenta. In such a retention as remains resistant to all these measures, manual extraction would seem to be the last resort, and might be interfered with by the *previous use* of pituitrin.

Traction upon the cord I have never indulged in lest inversion of the uterus might result.

To forestall hemorrhage I have made it a practice to hold the fundus uteri after birth of the child and after expulsion of the placenta. Of late years I often give pituitrin in addition unless there is very firm contraction and no flowing of consequence; but I do not use pituitrin in every case.

It is also safe to watch the pulse, the uterine contractions and the external flow for at least one hour after delivery. *Secondary hemorrhage* occurring seven hours after delivery I once met in consultation, but have never seen in my own practice. Concealed hemorrhage is much less frequently encountered since the days of pituitrin, I am confident. And I believe we will all grant pituitary extract to be a boon to the obstetrician.

The matter of *wounds, lacerations and abrasions* of the parturient canal next need careful investigation. We used to sometimes meet a physician who never had perineal lacerations. I always wondered whether he looked for them. It has been a rule to let alone cervical lacerations uncomplicated by cervical hemorrhage, but under favorable surroundings, provided the patient is not exhausted, I believe there is no

\*Read in Section on Pediatrics and Obstetrics, Annual Meeting, Oklahoma City, May, 1920.

better time to make such repair, using chromic catgut or some absorbable suture material.

In the vagina there are frequently lacerations running upward, or there may be a horseshoe-shaped tear around the edge of the mucus membrane at the vulval perineal opening. The common clean cut or ragged separation through the perineal body to the sphincter or rectum is not so often seen now days, but I have found irregular small lacerations about the labia minora or on either side of the meatus urinarius quite common where there has been excessive distension of the vulval opening. In my experience all of these are better closed by fine chromic catgut lest they open the door to post partum infection. For lacerations of the perineal body, non-absorbable suture on the skin surface is more reliable, I believe.

It has not been my experience to find any cases so feeble as to contraindicate immediate suture of all lacerations, and I use a little ether or chloroform where there is much repair to be done.

*Retention of urine* may be due to prolonged pressure of the foetal head or may follow the use of an anesthetic, as ether or morphin. Careful instructions should be given to the nurse or attendant lest the bladder be forgotten until over distention has taken place. Every effort should be made to avoid the use of the catheter, for if once begun it may be difficult to get bladder action thereafter. Holding the patient up will often assist and also drains the vagina as well, although stitches, if extensive laceration has occurred, would contra-indicate sitting up.

*After pains* are a real source of shock to a patient already depressed by pain and flowing, they should therefore be relieved by an opium-ergot combination in doses sufficient to insure rest.

*Post partum eclampsia* while not common should be guarded against in those cases having threatened before labor. Frequent observations of the blood pressure, and when necessary, examination of a catheterized specimen of urine may give warning of renal irritation.

*Infection*, we have been led to believe, should not occur where a strict aseptic technique has been pursued. A recent article in the Journal however calls attention to focal infection as a possible source, and recommends pre-puerperal care of teeth, tonsils and intestinal tract as preventive measures.

I would expect the vast majority of infection to arise however from some neglect in asepsis. Rectal examinations instead of vaginal I have found to be a decided aid in preventing those mild, low grade infections we used to charge up to "milk fever." The only objection to rectal examination is that should the patient ever

suffer from piles afterwards she will lay it to your door.

In spite of considerable care, the fact remains that we do still get infections from some cause or other and in order to keep posted we should insist upon a temperature record for the first week of convalescence. Should the temperature show any signs of climbing during the first 48 hours after delivery, I use silver in the form of collargolum solution internally every two hours and have come to have considerable confidence in its early use.

*Malaria* is not always an excuse to explain our infectious cases by, for I have lately seen several cases which responded promptly to quinin, and I never met this complication during my seventeen years in Massachusetts.

*Cystitis* can nearly always be charged to faulty technique and the use of the catheter when unavoidable should be at first employed by the physician himself using the uttermost care to avoid infection. After the swelling of the vulva has subsided, if catheterization is still necessary, it can be entrusted to a nurse, provided she is trustworthy and that you have shown her exactly how you want it done. Gloves, boiled glass catheter and a carefully cleansed meatus are essential to a safe catheterization.

*Lochia* cause concern when by foul odor they indicate infection from without or retained placental necrotic tissue within the uterus. A careful inspection of placenta with its membranes will show whether it has been entirely expelled and if on guard for retained fragments one can warn the nurse to watch for pieces which may be expected to come away and to report any rise of temperature. I have never had any trouble from these pieces and always leave them alone believing nature is better than art in this case. In case a strip of membrane tears away, I pick up the end at the vulva in artery clamps and twist it into a cord when it will frequently slip out.

*Puerperal psychoses* are rare in my experience, but one case occurred in which the mother became within 24 hours after delivery morose and melancholy, declared she was going to die, said husband did not care for her, that the nurse left her in dirt and filth, and that she did not want to see the baby nor would she nurse it. This condition of mind lasted nearly a week during which time she was both suicidal and homicidal and strict precautions were used with both mother and baby to avoid accident. As the mother's interest in the baby became aroused, the mind cleared up and complete recovery followed.

*Subinvolution* should be watched for and a routine bimanual examination of the pelvic

organs after the lochia have ceased should be a part of every confinement case.

In many cases I have found a retroverted heavy uterus and advise knee-chest position and in marked cases the use of a Hodge hard rubber pessary for a few weeks. This precaution will prevent the backaches and dragging feelings so frequently complained of by primipara. It is well to advise such young women also that while nursing they need not expect to menstruate regularly since they are often alarmed by the absence of this function, thinking themselves pregnant again. Women may be irregular, but I have seldom found them pregnant again during the early months of lactation.

*The care of the breasts* during the establishment of lactation is one of the most fertile causes for anxiety during the convalescent period. If one has treated the nipples by soap and water washing and massage daily for a month preceding delivery, the chances for avoiding cracked and bleeding nipples or retracted nipples will be much improved. Where one nipple is shorter or flatter than its fellow, it may be difficult to get for it an equal share of attention, so that a crack of the overworked nipple and a caking of the undernursed breast are upon you before you are aware.

Too long nursing periods, especially at first, may be the cause of *cracks and ulcerations*: the chewed up nipple may become very troublesome.

The baby should be put to the breast after the mother has had six or eight hours rest, but meanwhile given no bottle or spoon feeding, since it must first learn to nurse; this nursing may continue five minutes and be repeated at from six to four hour intervals until the milk arrives when the baby should be nursed every two hours, if possible to awaken it that often.

To the ordinary care of the nipples and baby's mouth with boric acid, I generally add boric acid ointment upon the nipple after nursing, especially if there is any abrasion or tenderness developing.

In spite of all precautions cracks frequently develop, and when deep enough to bleed may require suspension of nursing on that side for twenty-four hours, and then the use of a nipple shield if the baby can be made to use it. Compound tincture of benzoin, or boric acid ointment may be used. I would avoid silver nitrate stick which is advised by some.

*Over filled breasts* are also very painful and troublesome. A breast may become so large that the nipple flattens out and the baby can scarcely get hold of it or becomes suffocated by burying its nose in the breast itself. Babies often are not hungry or so profoundly sleepy as to take but little interest in the breast.

Preventive measures are first of all a snug breast bandage applied after the delivery, the moderate use of fluids until the first rush of the milk is over, thorough evacuation of the bowels upon the third day, prompt use of the sterile breast pump in case the baby is lazy. In those breasts that will not pump out satisfactorily, it may be necessary to give a tablespoonful of magnesium sulphate every hour for three doses, which will relieve the engorged breasts and keep the nurse busy for the time being.

If over filled breasts become caked, I have found that binding with a firm, well applied bandage and nursing or pumping will generally relieve without massage. Most old women nurses want to rub with hot oil or lard and oftentimes bring on abscess by unskillful manipulation and bruising of the engorged tissues, but gentle massage from periphery to nipple may relieve the condition promptly.

*Abscess* is generally due to cracked nipple or over filled breast and undoubtedly is associated with lowered resistance due to sudden chilling of the chest, or from over exertion. It occurs early, and at all times during lactation. It frequently recurs during a single lactation or may threaten and be aborted by proper treatment. I have seen infection start as many as seven times in the course of a single lactation and be aborted by appropriate early treatment each time.

This unfortunate complication is ushered in by a chill followed by fever, red streaks appear upon the skin and there is local tenderness, heat and swelling.

These cases should stop nursing upon the inflamed breast, bind it up and give the baby a bottle when that side is due to be nursed. I have used fullers earth externally with ice bag over all, and the use of silver internally seems to aid in aborting or at least in rendering the infection less severe. I have not used serums or bacterins in these cases, nor have I had experience with vaccum cup as recommended by Bier. In the presence of pus radiating incision will drain and when used early, will frequently permit of prompt return of function to the breast.

I warn the nursing mother to protect her chest at all times by sufficient clothing and to avoid sudden chilling of the surface and too strenuous arm exercise while nursing. She is also advised in case of soreness or redness appearing to tie up the breast, stop nursing, apply cold and consult her physician at once.

To me, one of the most troublesome conditions in early lactation is a *slacking of the milk flow* after the mother gets up. The breasts become flabby, the baby cries and seems hungry while all the psychology of grandmothers,



neighbors, untrained nurses, and frequently, I regret to say, even of trained nurses, is arrayed against you. These friendly advisers disturb the young mother by telling her that she has insufficient milk, that the baby is starving to death, or that the milk don't agree with baby. These remarks destroy that placid, hopeful and confident frame of mind essential to lactation. Many young mothers do not realize the importance of drinking enough fluid and this may be the cause of a slack flowing following the first rush of milk.

By great tact and wisdom only, can one combat these multitudinous female forces arrayed against the breast and for the bottle; since you can plead your cause but for a few moments once a day, while the many tongues of the opposition have all the rest of the twenty-four hours in which to argue against you.

To increase the flow of milk, give water, gruels, soups, malted milk, milk, cocoa in large quantities, and they will generally produce results.

Milk analysis, I have found very useful to guide one in modifying a faulty secretion and most cases can be satisfactorily adjusted by regulation of exercise and diet of the mother.

### The Baby.

But the other patient, the baby, cannot be advised or even coaxed at times, so that the doctor is often surprised at failing to have his way when baby is not so inclined.

After the baby has arrived, cried and is breathing normally, one generally wraps it in a blanket, lays it upon its right side and puts it in a safe place until it can be washed and dressed. If baby does not breathe, or is cyanosed or livid, gentle inflation of the lungs by mouth or pulmotor will revive if the heart is beating. Blue baby from patent foramen ovale I have seen but twice. A husky child that has had considerable ether will cry after several stinging slaps on the buttock. A pan of warm water is better for a depressed, livid one. I never swing a child after the Sylvester method, it looks too rough for me.

The eyes should be given a preliminary wipe with sterile water or boric solution when head first emerges, and later be treated, as the law requires, with some silver antiseptic, care being taken that it really reaches the conjunctival sac, a point upon which you and the baby are apt to differ, particularly regarding the second eye. I have never had a severe ophthalmia since I began treating every case with silver.

The cord may be clamped and cut at birth or one can wait until pulsation in it ceases. I tie with sterile bobbin letting the tape sink down into the groove made by the clamp, and apply three ligatures never having seen one bleed

when thus treated. If in a hurry a single tie plus a clamp is safe temporary treatment.

The cord dressing had better be done by the doctor since nurses are not always capable of doing a surgical dressing. Sterile gauze covered by absorbent cotton and a bandage have served me well. The cord falls in my experience from the fourth to the sixth day and has varied between the third and the seventeenth days. I dress the navel then with dry gauze and a dusting powder, never by ointments. Slight infections about navel are rare, serious ones practically absent with aseptic care. A weeping navel due to a granulating surface deep in its folds may discharge a long time, unless kept disinfected and dry.

*Hemophylia* with umbilical oozing I have seen once. The baby lived. Epsom salts and adrenalin were used to control the bleeding.

Jaundice is common in the new born, is generally harmless and needs no treatment. I give pumpkin seed tea to relieve the relatives and could never see that it did the baby any harm.

The urine is frequently red, staining the diaper and alarming the mother who mistakes uric acid for blood. This uric acid infarction also cures itself but water between nursings may aid nature. The establishment of lactation is for the baby the all important problem, and about it all the powers of evil conspire to defeat this important function. All the women kind of the entire neighborhood can't sleep nights until the poor little dear has been fed and they will use every subterfuge to stuff the infant with sugar and water, cocktails and diets too numerous to mention, before the child has had a chance at his natural source of supply. This pre-nursing feeding I strictly forbid since I had a spooned baby persistently refuse the breast in spite of my best efforts to persuade. I maintain that baby must have the breast first, then if they must, sugar and water by bottle.

*Crying babies* during the first week are common, and while hard on the family, does not usually mean abnormal conditions, aside from the regulating process of getting accustomed to their new environment. But *colic* (I dread to hear the word) is one of the troubles which gives all concerned a most uneasy time. When due to too strong milk it is helped by using a medicine dropper to administer boiled water as the baby nurses. This dilutes an over rich milk. When due to rapid nursing, one can give a bottle of five per cent syrup before nursing to take off the edge of a too ravenous appetite. Changing the nursing intervals may relieve the condition. Keeping bowels free by oil or magnesia helps while one is treating the mother in order to modify the milk. And here milk

analysis generally gives you the key to the difficulty. Anis, peppermint, catnip and fennel have rarely done me service although I give them for the sake of doing something until I have located the cause of the colic.

*Society women* who hesitate about nursing can sometimes be won over by allowing the baby one bottle per day from the start, which gives the mother a chance to omit one nursing and so meet her social duties. I look upon this, however, as a compromise and advise every healthy woman by all means to suckle her child.

### PROCEEDINGS OF ST. ANTHONY'S HOSPITAL CLINICAL SOCIETY.

DR. CURTIS R. DAY, President      DR. J. F. KUHN, Secretary  
OKLAHOMA CITY

#### Death Report.

**Dr. R. M. Balyeat:** *Gastric Ulcer, secondary to ingestion of lye, with perforation and acute diffuse peritonitis.*

M. H., female, age 20 months, entered hospital July 8, 1920, with a history of difficulty in swallowing, of five weeks duration. Family history is negative.

Until her present trouble the child was perfectly well. Five weeks previous to her entrance to the hospital patient drank a small amount of lye, probably one or two swallows. The mother states that the tongue, mouth and lips were badly burned at that time. The next morning patient was able to swallow liquids, but no solid food until four days ago. Since that time no food or liquids have been taken.

At the time of our examination physical findings were entirely negative except for evidence of marked loss of weight and strength. An attempt was made to give barium by mouth during which time she was fluoroscoped. The barium could be seen to pass down to about the point of the first normal constricted area of the esophagus. The child would soon begin to cough and barium would be regurgated. Enough barium remained in the esophagus long enough so that an x-ray plate could be made. The constriction was well shown.

On the day of entrance it was decided to put the patient on atropin to see if it was not possible to get relaxation enough so that she could take sufficient nourishment to build up her general condition before dilatation was attempted. 1-500 atropin was given every four hours. After six doses had been given she began to drink milk and take oatmeal gruel rather freely and gained weight rapidly. She regained her normal strength and several pounds of weight.

On the 29th of July, dilatation of the esophagus by Dr. E. S. Ferguson, under ether anesthetic, was attempted. On account of the inability to get the child to swallow a silk thread the esophagoscope was used and the bougie was directed in this manner. A very small bougie could be introduced to a point which seemed most probable to be the very lower portion of the esophagus. A fair amount of pressure would not allow the bougie to pass beyond this point. There was no evidence of trauma from either the esophagoscope or bougie.

On the morning following the operation the patient was able to drink milk and gruel. She did very well except for an occasional bronchitis and was discharged from the hospital on the first day of August. The mother was advised to bring the child back for further observation if at any time she had difficulty in taking food. She was returned on August 10th with a history of moderate difficulty in taking food. At this time she had temperature of 101 and an examination of her chest showed a diffuse bronchitis. This soon cleared up. Atropin was increased to 1-200 grain three times a day. The child began to eat cream of wheat and oatmeal with milk and other soft foods. On account of her improvement it was thought best not to try dilatation for a while.

She entered the hospital the third time on September 19th. Her general condition was fair. She was able to swallow milk and gruel. She remained in the hospital several days, and on account of developing a temperature with evidence of acute bronchitis, operative procedure was postponed two or three times. On October 1st, dilatation was again attempted by Dr. Ferguson, Dr. McHenry and Dr. Early. A fair sized bougie apparently could be passed through the first stricture, but again they met obstruction at what seemed to be about the lower portion of the esophagus. With considerable pressure the bougie slipped through the obstructed area into what the surgeon felt was the stomach. On the morning following the operation the patient's temperature was 104 3-5, pulse 116. The abdomen began to distend. The distention became rather marked and the pulse increased to 140. Respiration 68. Several enemas were given without relief. Castor oil was given and the bowels moved rather freely but the marked distention remained. This led us to believe that the condition was one of peritonitis due to a perforation of the stomach.

Patient died on third day following operation. Necropsy findings were: Two split-pea sized ulcers at the cardiac end of stomach, which had not yet eroded through the peritoneal coat. One perforating ulcer, three mm. in diameter, surrounded by thickening and puckering of the

gastric wall and partially enclosed by plastic exudate. Acute diffuse plastic peritonitis.

**Dr. Lea Rieiy:** *Tubercular Meningitis (?)*

L. E., age 2 1-2 years, male, entered hospital complaining of "spasms." Past history shows normal delivery and good health up to August 1st of this year. Patient fell from a buggy in May. Then on August 1st patient had a convulsion, and one every day afterward for two weeks. Child was apparently normal from that time until two weeks before entering hospital. The convulsions came on without apparent cause and with temperature of 102 to 103 during the convulsion, and child was apparently normal, with mind lucid, after each convulsion. On the day of entrance patient had a convulsion lasting three hours, during and after which opisthotonos and nausea and vomiting were present.

Physical examination showed the right pupil contracted, the left pupil dilated, and neither reacted to light or accommodation. On the right side the reflexes were normal. On the left side the reflexes were exaggerated and patellar and ankle clonus elicited. Babinski and Oppenheim marked on left side, and absent on right side. Temperature 99.8. Otherwise negative.

Patient had another convulsion at midnight, five hours after entrance, and died twenty minutes later.

No necropsy was obtained. Due to the fact that the patient was in the hospital such a short time before death, the diagnosis was not definite. It is my opinion that the cause of death was tubercular meningitis or brain tumor.

### Case Reports.

**Dr. R. M. Balyeat:** *Bronchial Asthma.*

*Case No. 1.* Female, age 8 years.

**History:** Patient has had attacks of dyspnea since the age of nine months. At first these attacks came on during sleep, and following eating. She had attacks of atypical croup during the third and fourth years. In the fifth year the attacks were rapid in onset with expiratory difficulty and cyanosis, lasting from fifteen to twenty minutes, and usually coming on during the night. She has suffered frequently from urticaria and eczema. A great-grandmother, grandmother and mother have suffered from asthma or asthmatic bronchitis.

**Physical Findings:** Negative except for prolonged expiration and moderate hyperresonance of entire chest.

**Laboratory Findings:** X-ray showed small hilus shadows. Clinical pathology negative. Patient was tested with various proteins and

found strongly sensitive to oats and slightly sensitive to rice and salmon.

**Diagnosis:** True bronchial asthma.

**Treatment:** Advised not to eat those foods to which she was found sensitive. Adrenalin hydrochloride in seven minim doses, given S. C. when necessary for temporary relief.

**Progress:** Asthmatic attacks decreased in frequency and patient has been free from them during the last eight months.

*Case No. 2.* Female, age 41, occupation, housewife.

**History:** Has complained of attacks of dyspnea since nine months old. These attacks came on suddenly, ended abruptly, and lasted twenty to thirty minutes. Asthma was not diagnosed until she was ten years old. Then, until ten years ago she suffered no inconvenience except during attacks. During the last ten years she has wheezed and been moderately short of breath between attacks. Has had symptoms of hay fever during the past eight summers, beginning each year in July. Has been unrelieved by change of climate. During last six months, previous to entrance to hospital, she has had from four to sixteen attacks daily, during which time she has had opiates and adrenalin hydrochloride for relief. Family history negative.

**Physical Findings:** Prolonged expiration; evidence of marked emphysema; few moist rales in both bases. Otherwise negative.

**Laboratory Findings:** X-ray and fluoroscope shows rather marked peribronchial thickening; very moderate evidence of chronic tubercular infection. Clinical pathology negative. Test with various proteins showed her to be strongly sensitive to eggs and slightly sensitive to staphylococcus pyogenes aureus.

**Diagnosis:** True bronchial asthma, complicated with bronchitis.

**Treatment:** Autogenous vaccine (made from sputum and containing staphylococcus pyogenes aureus and pneumococcus) beginning with two minim doses and increasing one minim per dose till ten doses were given. Saturated solution of KI, ten minims three times a day.

**Progress:** Free from attacks since leaving hospital, six weeks ago.

*Case No. 3.* Female, age 56.

**History:** Has complained of wheezing, frequent colds, and abundant sputum for past eight years. Inspiratory difficulty, but not so much expiratory difficulty. Attacks have been more noticeable in the spring, fall and summer, and she has been comparatively free from them during the winter. These attacks have been very severe during the past three years. A maternal aunt and mother had chronic bronchitis.



**Physical Findings:** Barrel-shaped chest; evidence of marked emphysema; squeaks, groans, moist rales from apices to bases.

**Laboratory Findings:** X-ray shows evidence of marked emphysema. Clinical pathology is negative. Tests with various proteins proved negative.

**Diagnosis:** Asthmatic bronchitis.

**Treatment:** Autogenous vaccine (made from sputum, and the prevailing organism was streptococcus); small doses of KI; adrenalin hydrochloride S. C. for temporary relief.

**Progress:** Relief after six doses of the vaccine. No attacks during the past summer.

**Discussion:** These cases fall into the classification of Walker, which is a most logical one. The first is a true bronchial asthma, being sensitive to protein. The third case is an asthmatic bronchitis, being non-sensitive to protein. The second case is a true bronchial asthma, upon which there has been superimposed a chronic bronchitis.

In regard to treatment, potassium iodid is used to reduce the tenacious character of the sputum, and it is very important that tuberculosis be ruled out of the differential diagnosis before its administration.

**Dr. Horace Reed:** *Chorionepithelioma.*

This case is still in the hospital, post-operative, and the case report is incomplete. The case will be studied further and reported at a later date.

#### PROCEEDINGS OF OKLAHOMA CITY CLINIC, ROUND TABLE, WESLEY HOSPITAL.

**Dr. A. L. Blesh:** *Phlebitis as a Surgical Complication.*

We now have in the hospital on the surgical service two cases presenting complications as sequellae of non-infectious conditions which are of great interest.

**Case 1.** Mr. S., age 40, entered hospital with tentative diagnosis of appendicitis, chronic catarrhal, by his physician. For two weeks he had rather paroxysmal attacks of right sided abdominal pain. This pain often originated in the region of the right kidney, radiating toward the bladder. There was no fever of which there was a record, nausea had at times been present, attacks associated also at times with frequent urination.

**Physical examination:** Negative except for tenderness over right side of abdomen, most marked anteriorly over kidney. This soreness could also be elicited, but not so markedly over right renal region.

**Laboratory analysis:** Showed a few gran-

ular casts, a few R. B. C., and a few pus cells. Blood count, whites a trifle above normal.

Findings justifying a cystoscopy with catheterization and x-ray, which was done.

Left kidney normal, pathologic elements coming from the right. X-ray plates negative.

**Diagnosis:** Appendicitis, subacute, catarrhal. Appendix retrocecal and probably retroperitoneal.

Operation proved correctness of diagnosis. Through liberal incision it was demonstrated that the appendix which was very hard and much thickened lay against, if not quite in contact with, upper third of ureter—a not uncommon condition which will often occasion a renal syndrome.

**After History:** Convalescence normal for eight days. A pain in the right lower chest. Friction rales. Pleuritis. This ran usual course. One week later pain and swelling in right leg. Diagnosis; phlebitis. A week later a severer pain in left leg with swelling extending to abdomen and involving scrotum and foreskin in an edema.

Dilatation superficial veins left side of abdomen. Diagnosis, thrombo-phlebitis left iliac vein. Long after a perfectly clean abdominal incision has healed this patient is invalided from the surgical complications described and which is no doubt due to a series of metastases. Statistics show that thrombo-phlebitis of the leg occurs in about 1-200 operations with no difference as to frequency in septic or non-septic cases. This corresponds to our experience in over 10,000 surgical operations.

**Case 2.** Mrs. G., age 60, consults us for a large non-toxic goitre. There being no contradictions, a thyroidectomy was done easily. Within a week and when the incision in which no infection appeared was practically healed she began complaining bitterly of her right leg and foot. The foot and outer aspect of leg turned a dusky purple and no pulsation demonstrable in tibial artery.

**Diagnosis:** Arterial occlusion from embolic block.

At present dry gangrene is obvious and line of demarcation is forming. Later amputation will be done.

**Dr. J. E. Mraz:** *Preliminary Report of Three Cases of Ureteral Stricture.*

**Case No. 5420,** Mrs. M. T., age 24. Present trouble began about one year ago following an attack of fever of four weeks duration. Patient has had attacks of diffuse abdominal pain most marked on left side. This has recurred at variable intervals since, associated with this is vomiting immediately after food ingestion. Vomitus usually sour. States that she has vomited a little dark blood at times, and that



blood has been seen in stools. Pain radiates into left hip.

Cystoscopy: Negative except as follows: Left ureter catheter blocks at about pelvic brim and patient states that it gives rise to her old pain. Pyelogram shows normal sized pelvis and slightly dilated ureter. Three, three and one-half and four m.m. wax bulbs passed into left ureter at two-week intervals. Definite hang obtained each time and her usual pain reproduced upon passage of bulb through stricture area. Upon last visit patient states that she has suffered but very little with her left sided pain and expressed surprise that her stomach symptoms had entirely disappeared.

*Case No. 5545, Mrs. B. J. W., age 36.* Following some suppurative pelvic trouble for which patient was operated in 1907 patient has suffered with right sided pain radiating to hips, gastric symptoms such as pain, sense of weight and vomiting following food ingestion. Weight loss from 135 to 100. Urinary frequency with right sided pain. Symptoms aggravated at menstrual times.

Cystoscopy: Negative except right ureter catheter, blocks temporarily a few cms. from bladder and then passes the rest of the way as though being tightly gripped.

Pyelogram: Shows slight hydronephrosis (cap. 15 c.c.) and hydroureter with constriction in lower right ureter. Wax bulb passed twice at two-week intervals. Some improvement in symptoms.

*Case No. 5704, Mrs. J. M. H., age 49.* For a period of twelve years patient has had periodic attacks of left sided pain radiating bladderward and associated with frequent urination. Coincidentally there is pain in rectum. Last spring attack was associated with fever. Occasional attacks of "dyspepsia." Physical examination negative except for tenderness in left pelvis.

Cystoscopy: Negative except left ureteral orifice appears puffed. Left renal pelvis injected with 22 c.c. of sodium bromid solution. Shows dilated pelvis and ureter with constriction in lower ureter. Left kidney urine shows pus, and culture shows colon bacillus in pure culture. Put on autogenous vaccines with bi-weekly passages of wax bulb and pelvic lavage every five days with increasing strength solutions of silver nitrate. Further report later as to progress of cases.

#### Dr. J. C. McDonald: *Syphilitic Iritis.*

*Case 1, Mrs. B., a woman twenty-three years of age, came to the clinic because of pain in pelvis due to a pyosalpinx. Because of glandular enlargement a leutic condition was suspected, a Wassermann test was made which*

*showed a four plus positive. After her operation which was a left salpingo oophorrectomy, she was given neosalvarsan and mercury intravenously until she left the hospital two weeks later. After leaving hospital patient was to receive leutic treatment from her home physician.*

Four months after leaving hospital patient returns with an acute iritis of right eye which had developed during a rest period from her specific treatment. After several days of local treatment of the eye in which there was no improvement, it was decided the iritis was probably due to syphilis. Patient was given .45 gm. of neosalvarsan to return in one week. One week later the eye showed marked improvement and practically all pain was gone. She was now given .75 gm. neosalvarsan and in one week more the eye had entirely cleared up.

*Case 2. Mr. A. H., came in because of an inflamed eye which had been troubling him slightly for several days but is now so painful he cannot work. Right eye shows contracted pupil which acts very sluggishly to light. Cornea shows some infiltration. There was no history of trauma. Upon questioning the patient it was learned that he had a chancre nineteen years ago. In rolling up his sleeve to take blood for Wassermann test the skin showed a marked maculo-papular eruption which appeared like a secondary rash. Cervical inguinal and epitrochlear glands distinctly palpable. Atropin caused irregular dilatation of pupil. Wassermann test shows a four plus positive. Patient referred to Dr. Mraz who gave him neosalvarsan gm. .45 with daily intravenous injections of Hg. oxycyanide gr. 1-8. In one week eye was much improved. Patient now given neosalvarsan gm. 6 and one week later eye had cleared up.*

*Case 3. Mr. B. B., Patient entered hospital because of an epididymitis, left testicle. An epididymotomy was done and patient did well. One week after operation right eye became inflamed and painful. Eye was treated for several days with local treatment with no apparent improvement. A Wassermann test was made which was four plus positive. Patient had chancre two years ago and received treatment for it and has had eight negative Wassermanns since then from Federal Clinic, so had thought himself cured. He was given intense treatment with neosalvarsan, mercury and iodides. Atropin was also continued in eye. There was some corneal infiltration over upper half of cornea. In ten days from time leutic treatment was begun eye showed marked improvement. In three weeks eye was entirely well with only very slight corneal infiltration which has now entirely disappeared.*

**Dr. D. D. Paulus:** *Case of Five and a half Months Pregnancy complicated by ruptured appendix with abscess and acute nephritis.*

Patient age 36. Para III. Previous pregnancies and labor without complications. Never has had any serious illness of any kind. Last period in latter part of June. Had usual nausea in morning during second month. Morning vomiting started during third month. Has vomited also at times following taking of food at noon and evening meal. This has kept up until her entrance to hospital. Physician states that vomiting never was extreme and that she has lost very little weight. Her urine has been negative except for traces of albumen at times.

About ten days before entrance to hospital she began to have pain in lower right quadrant of abdomen, also in right lumbar region. Five days ago began to have fever. Two days before entrance physician first saw her and found considerable tenderness in right lumbar region but not so much over appendiceal region. On entrance to hospital W. B. C. was 15,400. Urine showed trace of albumen but no casts. Diagnosis retrocecal appendix. Operation shows retrocecal appendix with abscess.

Patient went along fairly well until seventh day in hospital when vomiting reoccurred. Urine at this time showed larger amount of albumen with granular casts. Two days later urine showed in addition, considerable blood. Diagnosis acute nephritis probably toxic. Fourteen days after operation when induction of labor was decided upon. That evening patient began to have labor pains and was delivered of premature female child alive. Infant lived for twelve hours. Cause of premature labor probably was toxic plus a temperature of 100 that day.

Since then patient has vomited only a few times. Pulse runs around 110 to 120. Urine shows no blood but casts are still present. Unless other complications occur, we expect this patient to go on to a good recovery. Her kidney needs careful watching though after she leaves the hospital.

Our treatment for vomiting of pregnancy in severe forms consists of a daily hypodermic of one ampule of liquid corpus luteum and one teaspoonful of liquid taka-diastase with 1-4 of grain of novocaine 10 minutes before meals. During the period of severe acidosis 250 c.c. of 10% and on several occasions 20% glucose was given intravenously every day.

**Dr. M. E. Stout:** *Report of Toxic Goitre.*

I wish to report another toxic goitre wherein I made the same mistake that we have talked so much about.

*Case No. 6631, Mrs. M.* Came to the hospital complaining of nervousness and weakness. Says she has "some kind of spells" in which she becomes weak and exhausted, her heart is fast and she is compelled to lie down. Patient says that she does not think that she is hysterical, but that she knows she is very nervous.

I was called to a near by town three months ago to operate this patient for lacerations and procidentia, and I operated her, completely overlooking the goitre syndrome. But now when I go into her history very carefully, I am sure that her goitre was giving her much more trouble at that time than the pathology which I corrected, for, though she made a good surgical recovery, her nervousness and weakness have continued to grow worse, and I now learn that she had a similar exacerbation about one year ago.

Physical examination is negative, except for a small amount of edema about the eyes. The pulse is 130. No heart murmurs. Lungs normal. The thyroid is considerably enlarged, though it is bilateral and flat and does not show much.

She was ordered to bed and put on small doses of bromid until the acute exacerbation subsides. At that time one of the superior thyroids will be ligated under gas. If there is much reaction the other will be ligated at the end of a week or ten days and she will be sent home for a period of three or four months. If there is no reaction following the first ligation, the second one will be dispensed with and she will have a thyroidectomy at the end of a week.

#### OFFICERS OKLAHOMA STATE MEDICAL ASSOCIATION

President—Dr. Geo. A. Boyle, Enid.  
First Vice President—Dr. Jackson Broshears, Lawton.  
Second Vice-President—Dr. H. A. Lile, Cherokee.  
Third Vice-President—Dr. T. T. Norris, Crowder.  
Secretary-Treasurer—Dr. Claude Thompson, Muskogee.  
Associate Editor and Councilor Representative—Dr. C. W. Heitzman, Muskogee.  
Delegates to A. M. A.—1921, Dr. L. S. Willour; 1921-1922, Dr. L. J. Moorman.  
Meeting place, McAlester, May 17, 18, 19, 1921.

#### COUNCILOR DISTRICTS

District No. 1 Texas, Beaver, Cimarron, Harper, Ellis, Woods, Woodward, Alfalfa, Major, Grant, Garfield, Noble and Kay. G. A. Boyle, Enid.  
District No. 2 Dewey, Roger Mills, Custer, Beckham, Washita, Greer, Kiowa, Harmon, Jackson and Tillman. L. A. Mitchell, Frederick.  
District No. 3 Blaine, Kingfisher, Canadian, Logan, Payne, Lincoln, Oklahoma, Cleveland, Pottawatomie, Seminole and McClain. M. E. Stout, Oklahoma City.  
District No. 4 Caddo, Grady, Comanche, Cotton, Stephens, Jefferson, Garvin, Murray, Carter, and Love. J. T. Slover, Sulphur.  
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District No. 8 Craig, Ottawa, Delaware, Mayes, Wagoner, Cherokee, Adair, Okmulgee, Muskogee and McIntosh. C. W. Heitzman, Muskogee.

# THE JOURNAL

OF THE

## Oklahoma State Medical Association

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508-9 Barnes Building

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This is the official journal of the Oklahoma State Medical Association. All communications should be addressed to The Journal of the Oklahoma State Medical Association, 508 Barnes Building, Muskogee, Oklahoma. \$4.00 per year, 40c. per copy.

The editorial department is not responsible for the opinions expressed in the original articles of contributors.

Reprints of original articles will be supplied at actual cost, provided request for them is attached to manuscript or made in sufficient time before publication.

Articles sent this Journal for publication and all those read at the annual meetings of the State Association are the sole property of this Journal. The Journal relies on each individual contributor's strict adherence to this well-known rule of medical journalism. In the event an article sent this Journal for publication is published before appearance in the Journal, the manuscript will be returned to the writer.

Failure to receive the Journal should call for immediate notification of the editor, 508 Barnes Building, Muskogee, Okla.

Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

Advertising rates will be supplied on application. It is suggested that wherever possible members of the State Association should patronize our advertisers in preference to others as a matter of fair reciprocity.

### EDITORIAL

#### LOSING PRIVILEGES OF MALPRACTICE DEFENSE.

Those of us who have experienced planking down a few dollars more or less to feed the hungry maw of the legal fraternity appreciate just what it means to be saved that unpleasant, unnecessary expenditure. Nevertheless, this was the actual experience netted some of our careless members in 1920. Suddenly confronted with summons to appear in the District Court, to tell the Court and Jury their version of Johnny's un-x-rayed "sprain" of the ankle, which later developed obstinate stiffness, loss of function, worth ten or twenty thousand dollars to Johnny's otherwise worthless tribe, the member's application for defense met this astounding situation when the record was unravelled. January, 1920, slipped by with the member's good standing slipping by also; February, March, sometimes more time eased on into the past, until the member (now a non-member) was electrified by the summons. He tried to get up some "spleen" over denial to

defend his interests. Couldn't understand why he was so "mistreated," had always done his part, just overlooked it this time, etc. Well this time do not "overlook" it, as surely as you do, we will not "overlook" it, and regardless of our kind personal feelings for you, and regret at our inability to see it your way, you will not be defended, on the contrary you will experience the sensation of writing your lawyer a very handsome check, usually it will be a good deal more than you know Johnny's whole hide is worth, more than you get for two abdominal operations, but it is vastly more than the pittance necessary to keep you in good standing.

A hint to the wise is sufficient.

#### "MEMBER OF THE COUNTY, BUT NOT THE STATE."

First, there is no such animal. This advice occasionally percolates into the office as ex-planationary of the listing of names with the County Secretary's report of membership. Again we say, "There is no such animal," nor can there be in our scheme of fitness of things. Unless your name is sent to the State Secretary this month with the sum of \$4.00 attached to it, you simply "are not." You become an outcast, an unknown, one of that small minority of non-co-operating uselessness, causing your organization the wasteful expenditure of money to have your name struck from various lists, then again, when you do come back into the fold, more unnecessary expense, to have your name reset, placed back where you always intended it should be, and which only got into that category by reason of a careless county secretary, aided and abetted by your own lack of consideration for the extra work and labor you entail upon other men who should be left free by your prompt co-operation to use their energies for more important things than harassing you into doing what is your own business and of no earthly profit to any except yourself.

So, "Have a Heart," attend to your own business, "Do it Now." See your county secretary or mail your check, save your possible future needs by remaining in good standing. Above all do not waste the other fellow's time simply because you have plenty of yours to waste. He is in no such delectable state of existence, he must make a very good living entirely aside from the activities incident to the work of the Association and your membership.

#### BACKBONE VS. NOTOCHORD.

Perhaps one of the most important decisions that has recently been handed down by a



Court is one against the fly. See "A Supreme Court's Pronouncement Against the Fly," *Journal of the American Medical Association*, Dec. 11, 1920, page 1669. It appears from the editorial in the same number of the *Journal* that a certain teacher, one, we take it that understands sanitation and also his rights, objected to the number of flies in a hotel that he had elected to spend his vacation.

Possessing a real backbone, made of bone, he justly left the place, refusing to pay for the time that he had engaged the quarters. Mine host promptly entered suit and apparently was successful in the lower courts, but our teacher made of the sterner stuff that the most of us admire, but do not possess, carried his case to the Supreme Court. Here again we find a judge, versed in more than the usual routine of his profession, uttering a decision against that abominable pest—the fly. One that we believe will mark an era in its eradication, provided more men and women of that teacher's mold exist.

It is astonishing how few, how very few, of our own profession take these matters of sanitation seriously—personally we mean. We are always ready to chime in, with the daily press or someone else who spasmodically starts a crusade against any one of the numerous violations of essential sanitary procedure. But personally do we carry them out. *We say we do not.* How many of our profession have the nerve of that good Maine teacher and would refuse to eat in a dining room with flies as part of the atmosphere, or where coats, wraps and hats are hung on the wall directly over the table where we dine.

These are merely one or two of the more glaring defects of hygiene that we pass over daily. We mean pass over—until there arises another genius that will draw a circle about them and then we say, ME TOO. C. W. H.

## SUCCESSFUL VACCINATION AGAINST YELLOW FEVER.

Noguchi announces the perfection of a stable, practical vaccine immunizing against yellow fever, the announcement being made from his laboratory at the Rockefeller Institute for Medical Research.

The vaccine is a suspension of the *Leptospira icteroides* culture killed by heat at 60 c., and mixed with 0.3% tricresol. Doses of two cc. administered six days apart, but recently, owing to reports of sterile abscess formation, he suggests reduction of dosage to 1 cc.

As with other vaccines, the local and constitutional reactions vary in different individuals, marked reactions being rare. No-

guchi is of the opinion that the minimum immunity conferred is from five to six months, and states that probably protection does not develop until 10 to 12 days after vaccination. It is to be given the same care as to refrigeration as other vaccines, and may be procured by application to the International Health Board, 61 Broadway, New York.

This is of more than passing importance to Oklahoma's medical profession on account of the ever increasing travel into tropical Mexico, especially to the Tampico oil fields, many Tulsa, Muskogee and other cities oil men and workers having interests there which require their presence. Protection of these men is comparatively simple and as harmless probably as that of typhoid vaccinations; like that disease, too, treatment after the disease is well established is of little avail, owing to the many complications, and in some cases it is the most virulently fatal disease, death occurring in twelve hours after onset—before cause is suspected in some instances. That the procedure is positively protective against a dread disease unknown as yet to us, may be accepted hardly without question, and its use in every person likely to be exposed should be advised.

## Abstracts, Observations from Current Medical Literature

### CONDUCTED BY

RADIOLOGY AND DERMATOLOGY—Dr. Chas. H. Ball, Daniels Bldg., Tulsa.  
GENERAL SURGERY—Dr. M. E. Stout, Patterson Bldg., Oklahoma City.  
ORTHOPAEDICS—Dr. Earl D. McBride, 208 Colcord Bldg., Oklahoma City.  
EYE, EAR, NOSE AND THROAT—Dr. L. C. Kuvrkendall, McAlester.  
GENERAL—INDUSTRIAL MEDICINE—PUBLIC HEALTH—Dr. I. A. Mitchell, Frederick; Dr. J. L. Austin, Durant.

### THE TIME ELEMENT IN RECONSTRUCTIVE SURGERY.

(By R. W. Johnson, Jr., Baltimore, *Journal of Orthopedic Surgery*, January, 1920, Vol. 2, No. 1.)

He states that the success of reconstructive surgery has fired the enthusiasm of all who have practiced it and there is a great danger of disregarding time in pursuance of treatment. Having been made to experience personally as a patient the importance of time consumed in treatment as well as to see the part it plays in the lives of his patients, he makes a strong plea for its consideration.

The reconstructive surgeon must deal with the man as a whole. Two questions should be considered. First: "What can be done for this man's disability?" Second: "How long will it take to do it properly and carefully?"

There are several factors in the patient's life which give the Time Element its importance.

#### A. Factors.

1. End result. This must be determined upon percentage basis according to standards of function, occupation, earning power and ability to seek recreation.

2. Question of time; days—months—years. In the child this can be disregarded; in the twenties it must be taken fully into consideration; in the thirties and early forties the family must be considered as well as the patient.

3. Condition of life, viz: Personal and family and financial. It is one of the sad failures of the present civilization that a cripple may not be able to afford to undergo curative treatment.

4. Occupation.

5. The efficiency of mechanical substitutes or aids to accomplish the lost function.

6. Hospitalization, or production of chronic invalidism. Patients of a lazy, easy going disposition run grave risk of being permanently hospitalized.

7. General health. Early the saving of life is almost the only indication for radicalism. Later, when time has shown what sort of a course such a case is likely to run, the ways of conservatism and radicalism divide and a decision must be made as early as possible as to whether the end result will justify the conservative course. The time element must then come to the fore as a factor in influencing the decision.

8. Pain.

*B. How these disadvantages may be avoided.*

1. Short cut of radicalism. This is a course too often followed by the general surgeon, but too seldom for the reconstructionist.

2. Conservatism. With and without proper organization and equipment. The time element has been minimized greatly by the workshops and bedside occupation.

*C. Possibilities offered for minimizing the value of the time element in the various types of reconstruction.*

1. Military. It is the duty and privilege of a grateful nation to reconstruct its wounded soldiers as far as it can.

2. Industrial. Many of the larger corporations have grasped the idea, but the short-sighted policy still frequently persists. Reconstruction may be expensive, but if good for the State why not to the corporation.

3. Civil. The spread of the knowledge of the possibilities of reconstruction will teach the civilian who is injured, not to be content with a half way patching up.

Dr. Earl D. McBride, Oklahoma City.

### OSTEOMYELITIS.

(By Dr. F. C. Kidner, The American Journal of Orthopedic Surgery, August, 1920, New Series, Vol. 2, No. 8.)

In civil practice, bone infection is usually of hematogenous origin, while in military practice bone infection is usually through the skin. Blood infections invade and spread in bone, through anatomic channels, the blood vessels. Infection through the skin does not depend upon anatomy.

Acute osteomyelitis of blood origin will affect the area of bone supplied by the arterial system, or it will affect larger or smaller areas of medulla and cortex, in accordance with the size of the arterial branch, by which the infectious material enters. This will give an acute osteomyelitis involving a whole bone shaft, or a merely localized infected area, as in Brodie's abscess. In infections occurring from without the spread of the infection depends on the area of bone immediately soiled, on the extent of the fissures and cracks formed and on devitalization of medulla and cortex through the destruction of the blood supply.

In both the types of bone infection the amount of damage depends on the relation between the virulence of the infecting organism and the inherent resistance of bone to the infection.

Bone infection spreads rapidly and widely through the blood stream. It spreads slowly or not at all by extension and contact if drainage can be established. Early thorough drainage of all acute bone infections is therefore absolutely essential.

It was the recognition of this fact, that lack of drainage

and therefore the tension of pus caused necrosis, that led to and established the popularity of the Carell-Dakin method, and later, debridement in war surgery. The mistake was made at first of removing too much bone but later it was found that where there was a good blood supply, thorough incision of soft parts down to and around infected and damaged bone was all that was necessary.

In hematogenous infections, drainage should be immediate and open up the whole area of the infected blood supply. If drainage could be made sufficiently thorough and sufficiently early, there would be no opportunity for bone necrosis and spread of the infection.

In the compound infected fracture, the lessons of the war teach us that there is very little excuse for the establishment of chronic osteomyelitis. Early careful, accurate surgical removal of devitalized soft tissue from every nook and cranny of the wound through an incision large enough to allow inspection of every crevice, accompanied by removal of fragments of bone which are soiled and totally detached from soft parts, preserving all periosteum possible should be the first procedure. Then if the blood supply is poor and great possibility of septic material being left behind, the wound should be left wide open and drained in any efficient manner which allows flushing of the wound with Carrell-Dakin or other solutions. If sepsis does not follow, the wound can be closed when culture proves it aseptic.

When chronic osteomyelitis is established, he believes in conservative procedure of watchful waiting over long periods of time, incising occasional abscesses and removing frank sequestra. Most cases of infected fractures will, under proper splinting and rest reduce themselves to a low grade localized osteomyelitis with firm union. Function becomes possible and the remaining sinuses may be easily cared for. In this way a stage will be reached where infected bone can be recognized in contrast to healthy bone by the x-ray. Operation then may be of any type which may permit removal of necrotic sequestra permitting muscle and soft parts to fill the gap or if necessary the whole shaft may be removed.—Dr. Earl D. McBride, Oklahoma City.

### Editorial Notes—Personal and General

Dr. E. A. Leisure, Vinita, has moved to Afton.

Dr. W. A. Moreland, McCurtain, is travelling in Texas and Mexico.

Dr. C. R. McDonald, Jennings, visited the old folks in Louisiana during the Christmas holidays.

Dr. Fenton M. Sanger, Oklahoma City, visited the Johns Hopkins Clinics, Baltimore, in December.

University Hospital, Oklahoma City, has acquired one milligramme of radium purchased by the State Board of Affairs.

Craig County commissioners are considering a petition of citizens to set aside a building in Vinita to be used as a county hospital at Vinita.

Dr. Hugh Scott, Surgeon, U. S. P. H. S., Supervisor for Oklahoma, visited various Public Health Service Hospitals in Texas during December.

Ponca City citizens are raising funds for hospital maintenance by subscription. Appeals of the committee in charge are being very liberally answered.

Oklahoma Baptist Hospital, Muskogee, recently added an elaborate x-ray laboratory to their equipment. The work is in charge of Dr. R. N. Holcombe.

Dr. J. A. Dean, Ada, health officer Pontotoc County, is struggling with an outbreak of typhoid, reporting twenty-five cases of typhoid and eighteen of diphtheria.

**Dr. Richard Mooney**, Henryetta, was acquitted, "for lack of evidence," recently when charged with failure to report what was said to be diphtheria. It is said the case arose over diverse diagnoses of the trouble.

**Mayor (Dr.) I. Wade Bone**, Sapulpa, has appointed Dr. Edward Matoon, superintendent; Miss Elizabeth Whiting, superintendent of nurses, and a board of directors were chosen to operate Sapulpa's new municipal hospital, ready for occupancy December 15.

**Garfield County Medical Society** meeting at Enid December 3 elected the following officers: President, J. H. Hayes; vice-pres., P. A. Smythe; Secretary-Treasurer, Glenn Francisco, Enid. Vote of thanks was tendered Drs. G. A. Boyle and L. W. Cotton, retiring president and secretary.

**Vinita citizens** are preparing to hold a special election in Craig County for the purpose of conversion of a county building, formerly a jail, into a hospital. Proponents of the measure believe that it will be practically self sustaining the county being called upon to vote little money for maintenance, after the building is properly improved.

**Free or co-operative venereal disease control** clinics are in operation in fifty-five Alabama counties, containing 85% of the state's population. This good showing, however, is not satisfactory to Governor Thomas E. Kilby, who in special message to the extra session of the legislature, said: "These (venereal) diseases are striking at the very foundation of our social system and their control is the imperative call of the hour." The message produced immediate results.

**Quarantine and Commitment** of venereally infected women who neglect proper treatment, announcement of which stated that a State Quarantine Station would receive such at Lawton after December 15, has not yet been established according to advices from Dr. J. C. Mahr, Acting Assistant Surgeon, U. S. P. H. S., in charge of the Venereal Disease Control work in Oklahoma. For some reason not stated, the Lawton Committee in charge are not prepared to give such cases necessary care.

**"Volunteer Mothers,"** for France, suggested by Prof. Paul Carnot, Member of the Academy of Medicine and faculty of University of Paris, to raise the French birth rate and compensate for the unbelievable destruction of the best procreative blood of the French Nation during the war, "would be an outrage to all women and the greatest calamity that could befall a nation," says Miss Evangeline Booth, commander of the Salvation Army of the United States. Carnot's proposal would call for an army of volunteer mothers, nationalization of men, state control of children and permit women to have children without the formality of marriage. It is said there are 15,000,000 more women in Europe than men; nevertheless this and similar proposals violative of present standards of morality are producing the greatest criticism, the critics declaring that this and similar schemes are tending to reduce moral standards generally.

**That Yellow Fever** may become under practical absolute control, is the view of President Vincent of the Rockefeller Foundation, according to authorized announcement issued to the press December 9th. The statement is induced by the discovery of Dr. Hideyo Noguchi, at the Rockefeller Institute for Medical Research, of a vaccine for yellow fever, and prompts the hope of effective immunization by vaccination. Successful isolation of the yellow fever organism by Noguchi was followed by development of a serum for treatment of developed cases, the use being followed by a lowering mortality. The vaccine is being administered in New York City to passengers going to the tropics, with the belief that immunity will result. Large quantities have been shipped to tropical South American countries; Central American Republics, convinced of its protective ability that travel is permitted without quarantine to those vaccinated.

**A Permanent Committee** which will undertake to present to teachers and educational associations such matters of

mutual interest as concern and affect both professions, has been appointed by the President, at the suggestion of the Council on Health and Public Instruction, A. M. A., with whom the committee will co-operate in transmission of matters referred by the Council. The personnel consists of: Dr. G. A. Wall, Chairman, 720 Mayo Building, Tulsa; Dr. J. R. Burdick, Pediatrics, Hotel Ketchum, Tulsa; Edw. F. Davis, Ophthalmology, allied conditions, American National Bank Building, Oklahoma City; J. T. Martin, Public Health, General Medicine, 200 West 14, Oklahoma City; A. S. Risser, Public Health, Epidemiology, Blackwell. This should be one of the most important committees, undertaking work of far reaching importance, its duties calling for presentation of problems affecting every citizen, demanding accurate compilation of facts which eventually are passed on by the educator in every hamlet of the State, for assimilation and practical application of the future citizen.

**Bulletin of St. Anthony's Hospital**, Oklahoma City, November, is a very interesting issue, containing a symposium on various phases of pregnancy, issued by "A Resume," R. E. Looney; "Hygiene," E. P. Allen; "Syphilis," C. B. Taylor; "Ectopic Gestation," Leila Andrews; "Cesarean Section," a report of the cases operated upon in the Clinic January to June, R. M. Howard; "Occipito-Posterior Positions," W. A. Fowler; "Ophthalmia Neonatorum," Edw. F. Davis; "Psychoses of Puerperal State," A. D. Young; "Toxemias Complicating Influenza," R. S. McCabe. The supplement contains a corrected list of publications available from the library, indicating their source, i. e., subscription, donation, etc. Dr. John W. Riley is shown as having donated the preponderant number of publications, the entire list comprising a wide range of useful authorities. This issue is entirely free from the remarkable number of typographical errors noted in the first issue of this publication—the September issue seemed to have purposely been left to the tender mercies of the printer's devil, when it came to correcting proof. The organizations of St. Anthony's Clinical Society, St. Anthony's Staff and collateral bodies is doing much to place and keep the Oklahoma City profession second to none in the country; their example may be followed with profit and improvement in every city and society organization over the State with the assurance that by no other means may our profession render the fullest and proper service to the people they serve.

**Privileged communications** are not violated according to decision of the Nebraska Supreme Court (*Simonsen vs. Swenson*, 177 N. W. R., 831). A stranger, guest of a small hotel, becoming ill with sores over his body, seen by a physician who pronounced it syphilis, advised the man of danger of communication, requested him to leave, which he did not do, whereupon the physician advised the hotel keeper that the man was suffering from a contagious disease which resulted in his being forced to leave, his belongings put out, room and effects fumigated, all of which the plaintiff declared was a violation of the law of confidential communication, and under any circumstances a cause of action. The court said in part: No patient can expect that if his malady is found to be of a dangerously contagious nature he can still require it to be kept secret from those to whom, if there was no disclosure, such disease would be transmitted. The information given to a physician by his patient, though confidential, must, it seems to the court, be given and received subject to the qualification that if the patient's disease is found to be of a dangerous and so highly contagious or infectious a nature that it will necessarily be transmitted to others unless the danger of contagion is disclosed to them, then the physician should, in that event, if no other means of protection is possible, be privileged to make so much of a disclosure to such persons as is necessary to prevent the spread of the disease. A disclosure in such case would, it follows, not be a betrayal of the confidence of the patient, since the patient must know, when he imparts the information or subjects himself to the examination, that, in the exception stated, his disease may be disclosed.



Lawton physicians, by mutual organization, have apparently solved for the remainder of their lives the vexatious office rent question in such a manner that if there is any profiteering to be done they will get the benefit. Oil field excitement, as it invariably does, created the artificial demand for office rooms until the legitimate physician citizen faced constant rent advances and inability to secure other quarters if they did not like it. Drs. L. T. and E. S. Gooch, J. T. Antony, Secretary; E. B. Mitchell, President; Jackson Broshear; E. B. Dunlap, G. S. Barber, T. R. Lutner and Haskell Smith, dentist, formed a stock company, raised \$30,000.00 for the purchase of a suitable two story building, with 19 office rooms in addition to other necessary rooms, bath, six toilets, separate reception rooms, etc. Six thousand dollars was expended in making desired changes, all up to date. A private exchange is operated all day by a girl in charge and in afternoons another is on duty to receive and conduct patients to the physician sought. Dr. L. T. Gooch is Treasurer, and "profiteers" as the landlord of Drs. P. G. Dunlap and W. J. Mason, who office with the combination. This is the ideal arrangement for physicians anywhere. Considered solely from the economical viewpoint it speaks for itself as a great saver of money, and save too in such a manner as appeals to most physicians who can only make money by going into debt and saving to get out. The average Oklahoma physician in towns the size of Lawton and larger certainly pay out in excessive rents each month enough to safely cover twice the investment necessary. Add to that the inestimable benefit of being thrown in close contact with your brother professional and it becomes the ideal arrangement.

#### ON AFTER-CARE OF INFANTILE PARALYSIS CASES.

The New York Committee on After-Care of Infantile Paralysis Cases published and distributed the report of "The Survey of Cripples in New York City."

Our aim has been to send this report to those in a position of responsibility in agencies for cripples and to all those who might have a general interest in cripples, and in plans for their aid. The undersigned would be glad to know of anyone who has been overlooked and would appreciate suggestions for further possible distribution of the report.—Robert Stuart, Director, N. Y. Committee on After-Care of Infantile Paralysis Cases, 69 Schermerhorn Street, Brooklyn, N. Y.

### MISCELLANEOUS

#### CONTROLLING ANESTHESIA.

When a solution of a local anesthetic is injected into a tissue its effect is limited by the rapid dispersion of the fluid; that is the fluid is absorbed and carried off by the circulation, and the anesthesia is of short duration. True, the surgeon can control this condition when operating upon an extremity, as a finger, by throwing a ligature around the member, but even that procedure is open to objection.

If a means could be devised to hedge about the area of operation without engorging the tissues, such a device would be in insistent demand. No mechanical invention has yet offered itself, but we have an almost perfect check on the rapid absorption of the anesthetic in Adrenalin. This substance is readily soluble; it is compatible with all local anesthetics, physically chemically and physiologically; and it is not irritant. Furthermore, it controls hemorrhage and, in operations on the mucous membranes, affords the operator a clear view of the field. By limitation of the absorption of the anesthetic it is possible to do an operation with less of the drug, and thereby the risk of toxic effect is minimized.

This subject is dealt with more at length in the advertising section where the reader will find the fifth of the series of short articles on Adrenalin to which we have had occasion to refer in previous issues of this journal. A perusal of the article and its preservation for future reference are suggested.

#### WASHINGTON UNIVERSITY (ST. LOUIS) ANNOUNCES USEFUL COURSES.

The Medical School of Washington University is soon to publish and distribute an announcement of short courses for practitioners of medicine, varying in duration from six to sixteen weeks. These courses will be offered in medicine, surgery, gynecology, obstetrics, neurology, urology, orthopedic surgery, pediatrics, surgical pathology, and roentgenology. The primary object of these courses, which will begin about April 4, 1921, is to furnish practitioners in Missouri and neighboring states with the opportunity of renewing contact with a large amount of well correlated clinical material.

#### *Council on Pharmacy and Chemistry, A. M. A.*

The following articles produced by advertisers in this JOURNAL have been accepted for inclusion with New and Nonofficial Remedies by the Council on Pharmacy and Chemistry.

Articles accepted from our advertisers, October—The Abbott Laboratories; Acriflavine and Proflavine.

New and Nonofficial Remedies (Abridged report), See pages 20-21, 1920.

#### PROPAGANDA FOR REFORM.

**More misbranded nostrums and drug products.** The following products have been the subject of prosecution under the federal Food and Drugs Act: Beecham's Pills were held misbranded because the curative claims made for them were false and fraudulent, and because the pills were not made in England as claimed. Pike's Liver, Kidney and Stomach Remedy, because the therapeutic claims were false and fraudulent. Ergot Apol Compound (Evans Drug Co.), because the capsules did not contain the claimed amounts of drug and because they were an imitation. Prescription 1000, sold in two forms, a copaiba preparation for internal use and a dilute potassium permanganate solution for external use, was sold under false and fraudulent therapeutic claims. Rival Herb Tablets were tablets falsely claimed to be chocolate coated and sold under false and fraudulent therapeutic claims. Wilson's Solution Anti-Flu consisted essentially of oil of eucalyptus, methyl salicylate and thymol or oil of thyme, and was falsely claimed to be effective as a remedy for influenza, colds and grippe. Castor Oil Capsules (Evans Drug Co.), did not contain the amount of drug claimed (Jour. A. M. A., Sept. 4, 1920, p. 690).

**Prevention of Goitre.** The latest report on the prevention of goitre by administration of sodium iodid by Marine and Kimball—an investigation carried out under a grant from the Therapeutic Research Committee of the Council on Pharmacy and Chemistry—indicates a striking difference between those girls not taking and those taking iodine. The difference is manifested both in the prevention of enlargement and in a decrease in the size of existing enlargements. Of 2,190 pupils taking 2 gm. of sodium iodid twice yearly, five have shown enlargement of the thyroid, while of 2,305 pupils not taking the prophylactic, 495 have shown enlargement of the thyroid. Of 1,182 pupils with thyroid enlargement at the first examination who took the prophylactic, 773 thyroids decreased in size, while of 1,045 pupils with thyroid enlargement at the first examination who did not take the prophylactic, 145 thyroids decreased in size (Jour. A. M. A., Sept. 4, 1920, p. 674).

**Using Unfit Ether.** In the case of *Moehlenbrook versus Parke, Davis and Company et al*, the Supreme Court of Minnesota denied the surgeons who had administered the ether a new trial, after a verdict had been entered against both the manufacturer and the surgeons. The Supreme Court holds that for the death which resulted from the use of the unfit ether both the manufacturer and the surgeons were responsible. The surgeons were held to be negligent in administering to a patient ether that was unfit for use and in their care after the ether was administered (*Jour. A. M. A.*, Sept. 11, 1920, p. 763).

**Nature's Creation.** This is one of the fake consumption cures. It was originally put on the market as an absolute cure for syphilis. When analyzed in the A. M. A. Laboratory it was found to be essentially a solution of potassium iodid in a weakly alcoholic medium containing vegetable extractives and flavoring matter, and small quantities of inorganic salts (*Jour. A. M. A.*, Sept. 11, 1920, p. 758).

**Iodex, A Misbranded Iodin Ointment.** (1) Claim: 5 per cent iodine. Finding: iodine content only about 3 per cent. (2) Claim: free iodine. Finding: no free iodine. (3) Claim: absorbed through the skin, iodine can be found in urine 30 minutes after inunction. Finding: the assertion that iodine can be found in the urine after Iodex has been rubbed on the skin has been experimentally disproved. The preceding is taken from a poster of the A. M. A. Chemical Laboratory at the A. M. A. New Orleans meeting (*Jour. A. M. A.*, Sept. 18, 1920, p. 830).

**Calcidin Tablets—Abbott.** Calcidin is claimed to be a mixture of iodine, lime and starch. In contact with water, the iodine and lime react to form calcium iodid and calcium iodate. By the acid of the gastric juice, the calcium iodid and calcium iodate are decomposed with liberation of free iodine. The administration of calcidin tablets amounts to giving free (elementary) iodine. The effects produced by the administration of free iodine appear not to differ from those produced by the administration of iodids, and, therefore, calcidin has no advantage over the iodids, such as sodium iodid (*Jour. A. M. A.*, Sept. 25, 1920, p. 892).

**The Bethlehem Laboratories Explain.** The president of the General Laboratories, who is also vice president of the Bethlehem Laboratories, explains that the Bethlehem Laboratories is the sales and distributing organization for hyclorite, which is manufactured by the General Laboratories, and that the offer from the Bethlehem Laboratories to sell to physicians shares in the company was the unauthorized act of an authorized agent. The General Laboratories and the Bethlehem Laboratories recognize the impropriety of soliciting physicians to purchase stock in their concern (*Jour. A. M. A.*, Oct. 9, 1920, p. 1016).

**Succus Cineraria Maritima.** The medical profession is at present receiving through the mail circulars extolling this nostrum for its alleged virtue in "absorbing" various forms of cataract. In February, 1917, the Bureau of Chemistry of the U. S. Department of Agriculture issued a Notice of Judgment which showed that the government authorities had prosecuted the firm which markets the preparation—The Walker Pharmacal Company—because claims were made on the trade package to the effect that that this nostrum was a remedy for cataract and other opacities of the eye. The authorities charged that these claims were false and fraudulent. To this charge the company pleaded guilty, but these claims are still being made through other avenues to the medical profession (*Jour. A. M. A.*, Oct. 9, 1920, page 1007).

**The Use of Arsphenamine and Related Compounds.** Many therapeutic perplexities remain after nearly a decade of trial of the type of compound which Ehrlich introduced. It is well for the practitioner to realize this, especially when expert workers still make an appeal for conservative interpretation. Arsphenamine has apparently made it possible or even probable, but only to the inexperienced has the cure of syphilis been made absolute and inevitable. Even the composition of arsphenamine and neoarsphenamine is not fully known, and the control of the products by the government is important. It should be borne in

mind also that neoarsphenamine behaves differently in the animal organism from arsphenamine, and should not be regarded simply as arsphenamine in a convenient form for administration. The various brands of arsphenamine and neoarsphenamine made in the United States compares favorably as to toxicity with those made abroad (*Jour. A. M. A.*, Oct. 9, 1920, p. 1005).

**Toxicity of Arsphenamins.** Roth has determined that if an alkalinized solution of arsphenamine or a solution of neoarsphenamine is shaken in the presence of air for one minute, the toxicity is increased. He points out that arsphenamine preparations which are soluble with difficulty are likely to be shaken to aid in the solution of the drug with the risk that chemical reaction may occur (*Jour. A. M. A.*, Oct. 16, 1920, p. 1072).

**Chaulmoogra Oil in Leprosy.** Continued trials made at the leprosy investigation station of the U. S. Public Health Service and the Kalihi Hospital at Hawaii seem to justify more than ever the statement that chaulmoogra oil contains one or more agents that exert a marked therapeutic action in many cases of leprosy. The intramuscular injection of the soluble ethyl esters of the fatty acids from chaulmoogra oil usually leads to a rapid improvement in the clinical symptoms of leprosy. The ethyl esters of iodine addition compounds of the unsaturated fatty acids in chaulmoogra oil have also been used. There is no experimental proof that this addition of iodine causes any increase in the effectiveness of the material used (*Jour. A. M. A.*, Oct. 16, 1920, p. 1071).

## NEW BOOKS

Under this heading books received by THE JOURNAL will be acknowledged. Publishers are advised that this shall constitute return for such publication as they may submit. Obviously all publications sent us cannot be given space for review, but from time to time books received, of possible interest to Oklahoma physicians, will be reviewed.

### PRACTICAL PREVENTIVE MEDICINE.

By Mark F. Boyd, M. D., C. P. H., Professor of Bacteriology and Preventive Medicine in the Medical Department of the University of Texas. Octavo volume of 352 pages with 155 illustrations. Philadelphia and London W. B. Saunders Company, 1920. Cloth, \$4.00 net.

As its title indicates the author has given us a practical compend on preventive medicine. The book contains three hundred twenty-one pages of text and one hundred thirty-five illustrations. It is divided into eight sections, to-wit: Diseases due to Invading Micro-Organisms; Epidemiology, Deficiency Diseases, Occupational Diseases, Diseases arising from the Puerperal State, Diseases Transmitted from Parent to Offspring, Special Aspects of Hygiene and Sanitation, Demography, Public Health. These are all subjects of interest but especially so are those chapters devoted to excreta disposal and the water supply of municipalities. With our ever increasing population of towns and cities it is incumbent upon every physician to know at least the principal features underlying these important subjects. These, this work succinctly sets forth. C. W. H.

## CLASSIFIED ADVERTISEMENTS

TWO GOOD LOCATIONS for general practitioner—\$4000.00 or \$5000.00 business. Near surgical center. Address "C. C." care State Medical Journal.

FOR SALE, \$5,000.00 practice and good five-room house with sleeping porch. Will introduce buyer of my house to my patrons. Have been here ten years. Best farming country in state. Price \$1000.00 for home. R. M. SHAW, M. D. Alex, Okla. 1-21



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### SOME CLINICAL ASPECTS OF CONTRACTED PELVES.\*

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Some authors define contracted pelves upon the basis of arbitrary standards of pelvic measurements; others upon the basis of the difficulty for which they are responsible at the time of labor. There is, therefore, great divergence in the reports of their frequency. Certain it is that no man will go far in the practice of obstetrics without encountering cases in which pelvic contraction will cause serious trouble, and upon the proper management of which will frequently depend the life and health of either or both patients. Failure to recognize in time and the improper management of these cases is responsible for many of the tragedies in obstetric practice.

The writer has nothing to present on this subject that is either new or original. It is the purpose of this paper to present to the busy general practitioner, especially, and to others, also, some facts which we consider of practical importance, in the hope that their discussion before this section may be of benefit to all of us in the better management of these difficult cases.

In the beginning let it be understood that the writer is of the opinion that any man who practices obstetrics should own a pelvimeter and be familiar with its use as taught by any good text book on obstetrics, but that, whether he owns a pelvimeter or not, it is little short of criminal if he does not carefully examine the pelves of his patients and become familiar with the significance of his findings. It is fortunate if this examination can be made early in pregnancy, or, at least, before the last month. It tends to dignify the practice of obstetrics. It is of real benefit to be familiar with the characteristics of the pelvis without the necessity of vaginal examinations at the time of labor.

What, briefly, are some of the things to be noted at examination?

In the normal pelvis the intercrystal measure-

ment will exceed the interspinous by about the same distance as the intertrochanteric exceeds the intercrystal—2 or 3 c.m. (as I.S. 26 c.m., I.C. 29 c.m., I.T. 32 c.m.)—and the oblique will usually not exceed the external conjugate by more than 1 c.m. or 1.5 c.m. (say, Obl., 20; Baud. 19). Variation in the ratio between these measurements is often indicative of an abnormal type of pelvis. For instance, if we find the interspinous approaching more nearly, equal to, or exceeding the intercrystal, and the intertrochanteric relatively increased over both, with the external conjugate 2 or 3 c.m. less than the oblique, we may judge that we are dealing with the flat type of pelvis, but these measurements will not enable us to diagnose insufficiency of internal pelvic dimensions except in extreme cases. A considerable decrease in the external measurements without a disturbance of the ratio is suggestive of a justo-minor pelvis but, except in extreme cases, is so inconclusive that it is of no practical importance. A decrease of the distance between the tuberosities of the ischia, if associated with a high symphysis, is suggestive of the male type; if associated with a normal symphysis, it is suggestive of the kyphotic pelvis. In the latter case there will be also a shortening of the distance from the symphysis to the tip of the sacrum.

The internal pelvic examination should be made at the examination of pregnancy. Should this not have been done, and if the doctor makes a vaginal examination during labor, he should carefully note, at the first examination of labor, the points about the pelvis that would otherwise have been noted antepartum. Should the patient have had previous easy labors with good sized babies, it is true that this practice will probably be of no benefit to this patient, but the time is by no means wasted. It is only by the careful study of many pelves that our judgment will become really good for the abnormal cases. The thickness, width, and direction of the symphysis should be noted, also the angle of the pubic arch, the prominence and distance apart of the spines of the ischia, the direction and mobility of the coccyx, the shape of the sacrum, and the diagonal conjugate. If the symphysis is unusually thick or wide, or is inclined more toward the promontory, it is of unfavorable prognostic sig-

\*Read in Section on Pediatrics and Obstetrics, Annual Meeting, Oklahoma City, May, 1920.



nificance, as these things will cause a relative shortening of the very important true conjugate as compared to the diagonal. The more acute subpubic angle is also unfavorable, as it does not permit the head to come forward closely against the subpubic ligament and forces it further backward increasing the difficulty of delivery and the danger of severe injuries to the soft parts. If the spines of the ischia are prominent and close together they will infringe upon the pelvic cavity and tend to cause difficulty in delivery. A true conjugate of less than 10 c.m. is considered as a contraction.

The above findings pertain to the most frequent types of abnormal pelvis—flat, justo-minor, male, and kyphotic. In this brief paper no other types will be considered.

In flat pelvis the difficulty is almost solely at the inlet. Once the largest part of the head has passed the inlet, the labor is likely to be quite normal. It is these cases that, to the chagrin of the obstetrician, sometimes precipitate in bed while he is preparing to do a cesarean section. Occipito-posterior positions and deflection attitude are not unusual. As in all cases of obstruction at the inlet, over-distension of the abdomen, false pains, early rupture of the bag of waters, and delayed labor are frequent.

In justo-minor pelvis the same difficulties with the same manifestations are present at the inlet except that abnormal presentations or positions are not so likely. The difficulty continues after engagement and the patient may become exhausted in the second stage or the prolonged pressure on the baby's head may necessitate forceps delivery, frequently with a great deal of difficulty. In either flat or justo-minor pelvis there may be no engagement of the head whatever or only a segment of the skull may be engaged and moulded down into the pelvic cavity. In these cases it is easy to be deceived. The advancement of the moulded segment and the caput may be taken from rectal or vaginal examination to mean a fully engaged head. It is important to know for certain, if possible, whether or not the head has fully engaged. According to Shears, the average distance from the largest part of the head to the shoulder is about 7 c.m.; and if the distance from the pelvic inlet to the shoulder is very much over 7 c.m. the head is pretty certainly not engaged, while if it is much less than 7 c.m. it is pretty certainly fully engaged. The head may be felt to bulge out toward the symphysis or even beyond the symphysis in unengaged cases. The more the bulging the less the likelihood of engagement. In these unengaged cases, if the sagittal suture is midway between the promontory and the symphysis, it is of good prognostic significance, while the

reverse is true if the sagittal suture is felt very much nearer one than the other. There is an absence of the symptoms of lightening in these cases. It sometimes happens, and especially if the patient is allowed to bear down before complete dilation, that the cervix becomes badly edematous, and in some cases a part or all of it may be crushed off by pressure between the head of the baby and the pelvic inlet.

In kyphotic and male pelvis the head usually engages normally, the difficulty, if any, being at the outlet. In some cases of male pelvis there is obstruction at the inlet with the same clinical manifestations as mentioned above. It is important to remember that with the male type of pelvis the diagonal conjugate and the external measurements except the distance between the tuberosities of the ischia, may be normal and yet, on account of the thick, wide symphysis extending up toward the promontory, the prominent spines of the ischia, and the narrow subpubic angle, the most serious difficulties may be encountered at delivery.

#### Treatment.

It is a good idea not to think too much in terms of centimeters in the management of these cases. A pelvis that may give a normal labor with a normal or small baby may present the gravest kind of difficulties with a large baby. Generally speaking however, pelvis with a true conjugate of 5.5 c.m. or less are absolutely contracted pelvis and no operation except a cesarean section may be done, even with a dead foetus infection or other unfavorable conditions. Those with a true conjugate of 5.5 to 8 c.m. are cases in which the cesarean section should be elected except in the presence of conditions which remove the objection to mutilation of the foetus—dead foetus, monstrosity, etc. Pelvis with a measurement of from 8 to 10 c.m. constitute the border line cases, than which there are no more difficult cases to manage in medicine or surgery. Most of these cases will deliver spontaneously if given the test of labor, the percentage increasing as the measurements approach the normal. Since this is true, they should be given the test of labor. If the signs of marked disproportion exist, as enumerated above (head floating free above brim and cannot be pressed down into pelvis, side of head bulging out to or beyond the symphysis, the sagittal suture nearer the promontory or the symphysis and not midway between them) it is best not to wait too long. If the head is fixed at the brim and a considerable segment moulded into the brim, it is permissible to wait for a longer time, depending upon the condition of both patients and the prospects for engagement. It is during this period of waiting that the real tragedies of obstetric practice occur. The progress of the

case is slow and painful and the temptation to meddle is too great for some.

It is important to remember some things to be avoided, as well as some things to be done, in all these cases. The patient should not become exhausted by being walked about or pulled upon in the first stage of labor. These things and the bearing down efforts frequently permitted in the first stage, not only wear out the strength of the patient to no purpose, but predispose to early rupture of the bag of water, edema and crushing of the cervix between the head and symphysis and unnecessary injury to the baby's head. In this connection it is important to remember that the cervix is not fully dilated until the largest part of the head can pass through it, after which we may be sure that the cervix will be drawn up out of reach, *so that the fully dilated cervix cannot be felt by the finger at a rectal or vaginal examination.* Manual dilatation of the cervix usually results in lacerations and predisposes to infection. It should, therefore, not be attempted.

We must remember that every one of these cases represents a possible indication for cesarean section. Every vaginal examination makes the prognosis decidedly worse if a cesarean section is done, so that we cannot properly manage these cases unless we refrain from vaginal examinations. As a matter of fact, the abdominal examination will usually give us more valuable information, and rectal examination will nearly always reveal such additional information as may be needed for the proper management of the case, so that in these cases we have laid down this rule: *No engagement of the head, no vaginal examination.* The only exceptions are the cases in which we are reasonably certain of good pelvic measurements from, first, a previous history of a normal labor with a good sized baby; second, careful antepartum pelvic measurements; third, full engagement of the head. Finally, efforts at delivery should not be undertaken until we are reasonably sure that they can be successfully terminated. One careful vaginal examination may be permissible by the operator to verify the diagnosis before proceeding with whatever operative procedure may be indicated.

We frequently see these cases after there have been repeated examinations by various doctors after various methods of delivery have been unsuccessfully attempted, after the structures have been seriously traumatized and the patient pretty certainly infected; in these cases there is no best thing to do for the patient. We simply have to take the least of the evils that are offered us. The mortality and morbidity of these cases is very high.

To put it another way, every patient, the sufficiency of whose pelvis has not been proven

by the normal delivery of a good sized baby, should have a careful pelvimetry made antepartum, preferably before the beginning of the ninth month. Patients with known short measurements or with a history of previous difficult labors or with unknown pelvic measurements, should be treated alike—if the head is unengaged prior to or at labor they should be treated as doubtful cases. These patients ought to be in a properly equipped hospital for their care, with the understanding of course, that spontaneous delivery may occur. If they cannot be given hospital care the case should at least be so conducted as to not interfere with any measure, such as cesarean section, which may offer the best promise of life and health to either patient. If the patient is not permitted to become infected or exhausted and if the bag of waters can be kept intact, we may much more safely adopt whatever method of delivery is best suited in the particular case. In all these cases vaginal examination and all other interferences in the first stage of labor are pernicious practices. In unengaged cases if we have managed the case as suggested above, a cesarean section is the method of choice for delivery. If the case has not been managed as suggested and there are reasons why we hesitate to do a cesarean section, a trial at forceps on the unengaged head may be undertaken once by a careful operator, but if the head cannot be pulled down into the pelvis with reasonable traction the forceps should be removed and the operation abandoned for other methods of delivery. The method of choice in these cases, after forceps have failed, is still the cesarean section with hysterectomy in infected cases. Should the woman refuse cesarean section, delivery by version should be attempted rather than perforation of the head of a living baby or the continuation of forceps beyond a reasonable traction on the head. This is the only case, in my opinion, in which a version is indicated in the treatment of contracted pelvis with head presentation. The likelihood of delivery of a living baby is small and a craniotomy on the after coming head of the baby after it has died is to be expected. Cases in which forceps have been applied and in which it appears that only a little more room is necessary for successful delivery constitute an indication for pubiotomy, but with the increasing safety of cesarean section the indication for this operation is becoming less and less frequent.

### Summary.

First, in the consideration of contracted pelvis the important thing is to determine whether or not the pelvis is sufficiently large to permit the passage of the head in a given case; second, vaginal examination at the time of labor and meddling during this stage are un-



necessary and pernicious practices; third, in cases with the head unengaged at the time of labor and with uncertainty as to the sufficiency of the pelvic dimensions the ideal plan is to wait for the test of labor without vaginal examination and elect cesarean section should engagement not follow a reasonable test of labor; fourth, high forceps are indicated only in cases which have been rendered unsafe for cesarean section and version as a treatment in contracted pelvis with head presentation, is indicated only in these cases in which delivery by forceps cannot be accomplished and cesarean section is refused; fifth, pubiotomy has a narrow field of usefulness in cases in which only a little more room is necessary for delivery per vaginam.

534 Liberty National Bank Bldg.

#### TUMORS OF RENAL PELVIS.

The case reported by W. E. Stevens, San Francisco (*Journal A. M. A.*, June 5, 1920), is unique in that the tumor of the renal pelvis was apparently secondary to a papilloma of the bladder; at any rate, no tumor symptoms of renal involvement occurred for more than one and a half years after the appearance and destruction of the bladder papilloma. The patient was a man, aged 70. In 1913, he noticed blood in the urine, and was troubled with frequent urination. Cystoscopy at this time revealed a pedunculated papilloma to the left of the left ureteral orifice. The symptoms disappeared following removal of the tumor with snare and cautery. Nineteen months later, January, 1915, he was in the hospital for two weeks because of severe pain in the right kidney region. His urine contained a trace of albumin, many hyaline, granular and cellular casts and some pus, but no blood cells at the time. Catheterization of the ureters revealed a few pus cells in the urine of the right kidney. The symptoms disappeared following rest in bed. Three years later, April, 1918, he entered the hospital because of blood in the urine. Examination of the urine at this time disclosed many blood cells, a trace of albumin and a few pus cells, but no casts. Cystoscopy revealed an inflamed bladder mucosa and somewhat bloody fluid escaping from the right ureteral orifice. Comparative functional kidney tests were negative. The urine was free from blood at the end of a week, and the patient left the hospital. Six months later he re-entered. Cystoscopy again revealed bloody fluid escaping from the right ureteral orifice. The bladder mucosa was normal. Functional kidney tests gave diminished values on the right side. The wax-tipped catheter showed no evidence of calculi. Pyelography demonstrated a right kidney pelvis somewhat elongated laterally and the ureter entering the pelvis at a right angle. A diagnosis of tumor of the kidney was made, and operation was advised and accepted. A large papilloma the size of a walnut was found when the pelvis was opened. No evidence of ureteral involvement was present.

#### MANAGEMENT OF ACUTE APPENDICITIS DEVELOPING IN LATTER WEEKS OF PREGNANCY.

The higher mortality which has been attributed to acute appendicitis during pregnancy, Norborne Page Cocke and James M. Mason, Birmingham, Ala. (*Journal A. M. A.*, July 10, 1920), state is not to be charged to the appendicitis or to the pregnancy so much as to the failure to recognize the disease promptly and to treat it along well established surgical lines. Appendicitis during pregnancy should always indicate immediate operation, and even in cases of doubt, operation is the safer course.

#### EXTRA-UTERINE PREGNANCY\* DIAGNOSIS AND TREATMENT

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In selecting a subject to write upon to be read before this section I chose this one because it is one that has not been discussed by this section in the last five years. The reason for this is that the treatment for extra-uterine pregnancy is always surgical, therefore, all papers on this subject have been written for, and read before, the surgical section. It would seem very probable that the physicians of this section would be apt to see these cases first, and therefore should make the early diagnosis. Of course some of you would refer your cases to surgery, while others who do obstetrical surgery would carry out the surgical treatment when the diagnostic findings point to an extra-uterine pregnancy.

I have purposely omitted the etiology and pathology in order that we might study more thoroughly and more particularly the diagnosis, and if the presentation of this paper will be of any assistance in making an early possible diagnosis of this condition so there will be a less number of cases left to nature, and fewer cases operated upon in which there has never been a positive diagnosis of extra-uterine pregnancy, I will feel that my time has been well spent in preparation of this paper.

#### Diagnosis, Unruptured.

In the early weeks before rupture of the tube or a hemorrhage into it, the diagnosis of ectopic gestation has hardly ever been made, because the tube is as soft as an intestinal loop. No pelvic condition gives rise to more diagnostic errors. DeLee says that every gynecologist and surgeon that he knows of, including himself, have made mistakes in diagnosing this condition. However, the majority of these cases give a history of previous pelvic inflammation; either gonorrheal or puerperal. This, with a period of sterility of from one to several years, would lead one to think of extra-uterine gestation. If pain is severe, it would suggest the presence of a tubal mole. The pain is intermittent in character and occurs when there is a leakage of blood into the pelvic peritoneum. If the tube ruptures into the abdomen, the pain is severe and more continuous. Up to the first four weeks of extra-uterine gestation, there are very few symptoms or signs and this is especially true of a non-ruptured tubal gestation.

After the fifth month of gestation, we are able to make a positive diagnosis of pregnancy from the findings of the foetal heart and pla-

\*Read in Section on Pediatrics and Obstetrics, Annual Meeting, Oklahoma City, May, 1920.



central souffle, and if this tumor which we have diagnosed as a pregnancy is situated to one side or the other, and we are able to palpate the uterus which seems normal or slightly enlarged, we are justified in making a diagnosis of extra-uterine pregnancy. Of course, the patient may menstruate, but it is irregular and usually prolonged.

### Diagnosis, Ruptured.

If, for any reason, the pregnancy is interfered with, the decidua is usually cast off from the uterus, and an almost characteristic dark prune juice discharge occurs and a cast of the uterine cavity may be thrown off either in one large piece or in a number of small fragments. tubal abortions in progress, or tubal mole have been diagnosed within the first few weeks of gestation. If there is any great amount of hemorrhage, the diagnosis is rather easy. The severity of the abdominal pain, the nausea and perhaps vomiting with chill and syncope, even though these symptoms are transient with a leucocytosis and normal or sub-normal temperature, we would be justified in making a diagnosis of a probable ruptured ectopic. This condition could be verified by a puncture in the posterior fornix into the pouch of Douglas. If blood is present, it would confirm the diagnosis, while on the other hand, if it was a pyosalpinx, we would find pus.

Every case of apparent abortion where the foetus and membranes cannot be demonstrated, it would be well to examine thoroughly for an ectopic pregnancy.

### Operation.

The earlier the operation, the better the prognosis. If operated on before rupture of the tube, the mortality is no greater than in any other clean abdominal operation. If the parents desire a living child and it is close to viability, we may wait until the child is viable, but nearly all surgeons are in favor of immediate operation. The preliminary preparation of the patient is the same as that in any other abdominal operation, plus preparation for the control of hemorrhage. As soon as the abdomen is opened the child is delivered and all bleeding points are clamped. When the pregnancy is not too far advanced, the tube and its contents are removed and the abdomen is closed without drainage. When we are dealing with an advanced pregnancy, the question of what to do with the placenta is the one of greatest magnitude. There are two ways of caring for the placenta. One is to leave it alone and bring up the sack and suture it to the abdominal wound and drain until the contents have come away. The other is to dissect it out. In the latter case we have to deal with a great amount of hemorrhage, but we can pack with gauze and if the patient is

in good condition she will make an uneventful recovery.

In conclusion, I wish to emphasize the thorough systematic examination in every case of suspected, but not confirmed, abortion. Also that immediate operation when a positive diagnosis has been made, is the treatment of choice.

### EXTRA-UTERINE PREGNANCY.

A. C. Beck, Brooklyn (*Journal A. M. A.*, Sept. 27, 1919), reports a case of full term extra-uterine pregnancy in which a living child was extracted, and both mother and child, when last reported, were in good condition. He sent out a questionnaire to over 200 physicians and their replies, together with a search of the literature, revealed only 262 cases of extra-uterine pregnancy between the years 1809 and 1919, in which operation was performed after the fifth month with a living fetus. The mortality of all the 262 cases was 35.8 per cent. The statistics and histories are discussed and the outline of an operative routine suggested by the study is given. In his conclusions the author says that because of the high mortality of advanced extra-uterine pregnancy and the infrequent occurrence of the condition, every case should be reported, and the relatively large number of children that survive should be considered in the interest of the child. The actual operative risk is less during the last month than at any other, and there is very little risk in delaying it until the thirty-eighth week if the patient is kept under observation. The delay offers the best chances for the child. Preliminary preparation for possible hemorrhage should be made before operating, and careful exploration as regards the placenta, the removal of which gives the best results, should be made to determine the proper procedure to be employed. The conditions which favor the removal of the placenta are: its attachment by a pedicle which can be ligated; easy exposure of the ovarian and uterine extremities of its blood supply—of the former especially on the side affected, and sufficient accessibility of the uterus to permit of hysterectomy from the opposite side and thus effect a ligation of the uterine end of the placental supply. Preliminary ligation of the vessels supplying the placental site should precede all attempts of removal, and when this is impossible, the placenta should be left in the abdomen where it will be ultimately absorbed. Closure of the abdomen without drainage is indicated when hemorrhage and infection are absent, even if the placenta is not removed. A slight danger of secondary hemorrhage exists and infection from the adjacent intestines may occasionally occur before absorption is complete, necessitating a second operation. If suppuration takes place drainage may be obtained through the vagina. Marsupialization should be limited to those cases in which the removal of the placenta is contraindicated and the presence of infection requires drainage or in which hemorrhage calls for the use of a tampon. "The continuous use of drainage invites infection in these cases, as is shown by the results obtained when this procedure was the one of choice."

### NONOPERATIVE DETERMINATION OF PATENCY OF FALLOPIAN TUBES.

I. C. Rubin, New York (*Journal A. M. A.*, Sept. 4, 1920), has found it possible to determine whether the tubes are patent or not by inflating the uterus with oxygen and in normal cases filling the peritoneal cavity with a measured quantity of oxygen. For the specific purpose of establishing the fact of open fallopian tubes the amount of oxygen need not exceed 300 c.c. The small volume of oxygen has the advantage of enabling the physician to examine the patient in the office without the necessity of her going to bed for twenty-four hours or more. The technic is described in detail.

## THE USE OF CORPUS LUTEUM IN NAUSEA AND VOMITING OF PREGNANCY.\*

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Unless the writer's experience is at variance with that of his colleagues', one of the most difficult and trying problems with which the obstetrician and general practitioner has to cope is that of the nausea and vomiting of pregnancy.

The use of hypodermatic injections of the soluble extract of corpus luteum in these cases has given the writer such uniformly satisfactory, and in some cases such strikingly happy results that we feel that we should publish our results, even though representing but a small series of cases, in the hope that our few cases may induce others of this section to do likewise, in order that we may eventually have statistics of sufficient volume to effectually prove, or disprove, the efficacy of this remedy.

While our series is very small, there being but fifteen cases to report, the results obtained tally so well with other published cases that we feel that there is more than a coincidence therein. The largest series of cases is that of J. C. Hirst,<sup>1</sup> who is the pioneer in this work, and whose early work in this direction was responsible for the writer taking up this treatment four years ago. Hirst reports 111 cases, of which 65 were entirely relieved and 34 so improved that what nausea remained was considered so slight by the patients themselves that further treatment was declined, as being unnecessary to their comfort. There were 12 failures, giving a total favorable result of 89.2%.

Quigley<sup>2</sup> reports 17 cases, of which 12 were benefitted permanently, 4 were helped temporarily, and one case showed no improvement.

In the writer's series of 15 cases, only one patient showed no improvement, and she had but four doses and at rather irregular periods. The other 14 showed results that varied from that of considerable improvement to that of marked and permanent relief. Most of the patients stopped treatment before permanent relief was obtained, for, after six to eight doses, they became so comfortable that they would rather suffer an occasional attack of nausea, and even vomiting, than inconvenience themselves to come to the office for treatment.

The theory of this treatment is based upon the fact that ordinary nausea of pregnancy

begins to decline about the end of the third month, which is also the time of the beginning of the absorption of the corpus luteum of pregnancy, and that there is an evident connection between these two events, which, as Hirst puts it, "is more than a coincidence." This treatment therefore proposes to utilize certain soluble extracts from the corpora lutea of pregnant animals, throwing them into the blood stream of pregnant women before their own corpora lutea are available for autogenous absorption. The results obtained seem to justify the above conclusion.

### Material and Technique.

The substance used is the soluble extract of corpora lutea of pregnant animals, cows, sheep and sows, preferably the latter. It is put up in 16 minim ampules, each containing 1-3 grain of the soluble extract, equivalent to 2½ grains of the dessicated corpus luteum. This extract is administered hypodermatically, preferably at the site of the deltoid insertion. DeLee<sup>3</sup> and others have given the powdered drug by mouth with little or no success. This is apparently ill advised because of the obvious condition of the stomach, prejudicial to retention and absorption, as well as by the fact that, if retained, the action of the remedy is apt to be destroyed, in whole or in part, by the digestive juices. Finally, if part of the good effect should be psychic, this is naturally favored by the hypodermatic method.

The syringe, preferably a glass one, and the needle should be boiled, and not sterilized with alcohol, as the latter is deleterious to animal extracts.

In the mild cases, one injection on alternate days may be sufficient, though we feel that better results are obtained in any case if daily treatments are given for the first week. In the very severe or pernicious cases, the kind that seem to indicate therapeutic abortion, we have gotten striking results from two treatments daily, sometimes giving two ampules for the first dose. The number of doses administered in our series ranged from 4 to 20, though all of the 14 cases which we have recorded as benefitted received six or more doses, the average being eight. For the best results however, we should advise not less than 10 or 12. Hirst states that his experience has taught him that not less than 12 doses should be given. He states, further, that if 12 doses do not produce improvement, the use of the remedy may be abandoned as hopeless.

As a rule no improvement will be shown until four or five doses have been administered, as the substance seems to have a cumulative effect, and does not appear to be able to impress the system until a certain concentration

\*Read in Section on Pediatrics and Obstetrics, Annual Meeting, Oklahoma City, May, 1920.

in the blood stream has been reached. We had, however, one case in which, after the first dose, the patient ate her first meal in three weeks; and after the second dose she began going to the table with the family, never to miss a meal afterward, though she had an occasional attack of morning nausea, which succumbed to some half dozen additional doses. Naturally, there is a strong suspicion of a neurotic causation in this case, which was relieved so quickly. She did not, however, show any other indications of a neurotic nature, being rather of the phlegmatic type.

To avoid tiresome repetition, we report in detail but three cases, which together typify the whole series.

*Case 1.* Mrs. J. B. D., age 36, Para IV.

I was called to see this patient January 16, 1918, in her eighth week of pregnancy. She gave a history of very severe vomiting in each of her first two pregnancies, which required her remaining in bed the greater part of the time during the early months of the pregnancies. In her third pregnancy, the vomiting early became pernicious and resisted all the usual methods of treatment, until at the end of the fourth month, her physician performed a therapeutic abortion.

At this time she had been vomiting severely for two weeks and could retain nothing. She was quite weak and was beginning to emaciate rather rapidly.

This patient received a daily injection of the extract for six days, at which time all nausea had ceased and the treatment was discontinued. On January 29th, however, eight days after the last dose, she reported the return of the nausea, though not of the vomiting. I then gave her three additional injections at daily intervals, with the result that the nausea disappeared entirely and did not return. The balance of her pregnancy was very comfortable, and she was delivered on August 20, 1918, of a large, healthy baby boy.

*Case 4.* Mrs. L. D. P., age 18, Para I.

I was called to see this patient on March 9, 1919, in her twelfth week of pregnancy. She had been nauseated for a month, but the condition seemed to be getting worse every day. She had not been able to retain any nourishment for ten days, and for the last few days had not been able to retain even a mouthful of water. This patient stated that, when not actually vomiting, her mouth and throat filled constantly with nauseating hot saliva.

I gave her the first dose of corpus luteum the morning of March 9, 1919. That evening she ate and retained her first meal in a month. This rapid relief convinced me that at least part of her relief was from psychic changes.

However, I believe that the organo-therapy was responsible for her ultimate complete relief, else the nausea would have returned when I discontinued the treatment. The next morning, this patient, though emaciated as though recovering from a case of typhoid fever, ate breakfast with the family, and, much to my surprise, phoned me not to call at the house, as she was coming to the office for her treatment. She came to the office daily for seven more treatments, and was discharged cured on March 18th. The remainder of her pregnancy was quite normal, and she was delivered of a healthy baby girl on September 8, 1919.

*Case 12.* Mrs. F. E. Y., age 23, Para I.

This patient was about seven weeks pregnant, and first called me at midnight of November 7, 1919. This was perhaps the worst case in my series, and had I seen it before I began to use corpus luteum, I think I would have been inclined to recommend therapeutic abortion. This woman had vomited almost incessantly for nearly a month, and had even vomited all night for the last week. She was completely prostrated, when I saw her, from the incessant vomiting, lack of nourishment and loss of sleep. She had been under a physician's care for a month without any benefit, and had finally been dismissed from his care with the statement that there was absolutely nothing else to be done for her and that she would just have to "weather it out" herself. I can assure my audience that it gave me a great deal of pleasure to say, with considerable confidence, born of previous successes with corpus luteum, that there *was* something to be done for her. And needless to say, I had an extremely grateful patient and family when it was demonstrated that she could be effectually relieved by so simple a procedure.

My first visit being in the middle of the night, I was not prepared to begin the treatment, but felt impelled to give her a little rest by the use of morphin hypodermatically. Of course, she awoke in a few hours vomiting worse than ever. I returned the next morning and gave her two ampules at once with very little, if any, immediate effect. I then gave her daily ampules for four more days. By the end of the fifth day, she was entirely relieved of vomiting and partially so of her nausea. After three days of rest and enjoyable eating, she came to the office on November 15th for a treatment, and again on the 17th, 18th, 20th, 21st and 22nd, to the end that she was entirely and permanently relieved. She received a total of 12 doses, in 11 injections.

This patient suffers from a slight exophthalmic goitre, but this condition did not seem to be a contra-indication to the treatment, as it was in several of Hirst's cases. I saw this



patient but a few days ago, and found that aside from troublesome constipation, she has been perfectly well since receiving the corpus luteum treatment.

### Conclusion.

Fourteen of such cases, added to the hundred odd cases in the literature, convince the writer that, in the soluble extract of corpora lutea, we have a valuable addition to the rather limited armamentarium of obstetric materia medica.

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### CESAREAN SECTION UNDER PROCAIN ANESTHESIA.

In a case of broken cardiac compensation at the eighth month of pregnancy with pulmonary edema and increasing albuminuria, the method of anesthesia employed for the performance of cesarean section was put to a severe test by J. Morris Slemmons, New Haven, Conn., and J. Murray Johnson, Bridgeport, Conn. (*Journal A. M. A.*, March 27, 1920). To be satisfactory the anesthesia must permit the patient to retain a posture both comfortable for herself and not unfavorable to the conduct of the operation. For the mother it must provide a greater factor of safety than does general anesthesia. And it must not deter the establishment of respiration in the new-born. Procain met the requirements satisfactorily. Preliminarily, a half-grain of morphin and a hundredth grain of atropin were administered hypodermically. Then the patient was placed on the table comfortably in a half-sitting posture supported by pillows. The bladder was emptied by catheterization, and the site of the operation prepared in accord with the usual tincture of iodine technic. One c.c. of pituitary extract was administered in the thigh as the operation began. In the median line, from umbilicus to symphysis, the skin was infiltrated with procain solution, 1:400, to which epinephrin had been added, in the proportion of 3 drops of epinephrin to each ounce of procain solution. For cutaneous anesthesia, approximately 30 c.c. of the solution were required, and that sufficed not only during the division of the skin but also of the subcutaneous fat, more than an inch in thickness. As the continuance of the incision caused discomfort, about 20 c.c. of the procain solution were used to infiltrate the fascial layer. The uterus was not delivered through the abdominal incision. Without procain infiltration that portion of the organ which appeared was tested with regard to sensitivity and, as the patient was unable to detect when the knife was in use, after the membranes were exposed, the uterine incision was prolonged with bandage scissors until approximately 15 cm. in length. The fetus was delivered through the aperture in the uterine and abdominal walls by the method usually followed in breech extraction. The patient made no complaint after the abdominal fascia became anesthetized, was not aware of the fact that the fetus was being delivered, nor that the uterine or abdominal incisions were being sutured. The post-operative convalescence of the mother was afebrile and without untoward complication.

### X-RAY DIAGNOSIS OF THE URINARY TRACT.\*

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I shall endeavor to cover in this short paper some of the points wherein the roentgenologist may be of service to the urologist, in the diagnosis, as well as a guide to choice of surgical procedure, and treatment of some of the pathological conditions of the urinary tract.

Recent years, with improved Roentgen apparatus and more accurate technique, have placed the x-ray in a rather important role in the diagnostic medicine.

Taking up one of the most familiar urinary diseases, namely, nephrolithiasis, I believe it is a fair rule that a renal calculus not large enough to cast an x-ray shadow is not going to cause extensive symptoms. Consistency of most renal stones is such that they cast a dense x-ray shadow, but I recall cases where it was only with great difficulty that this condition was differentiated from gall-stones. Also several cases in which both were present. Gall-stones usually show a varying density, and concentric rings, when typical. The atypical cases call for a special technique in making the radiographs, and various localizing methods can be used in differentiation. I desire to state that, in my opinion, in doubtful cases the roentgenologist, who personally takes the plates, or sees them taken, will register the greater number of accurate diagnoses, than the one who reads another's plates.

Urate stones are usually rough, not very dense, and often are multiple. Oxalate stones are smooth, cast dense shadows, and are slower in formation. Radiography often helps to differentiate between renal colic, cholelithiasis, appendicitis, tabetic crises, spinal caries, and gives the surgeon valuable aid as to choice of operation, thereby lessening trauma.

Regardless of symptoms, both kidney regions should be included in an examination, as in a case where I reported stone in left kidney on a case sent in for right kidney x-ray, the surgeon calling me and insisting that I must be wrong. Confirmed at operation. Placed in the peculiar circumstance of having cases referred, with practically no history for the reason that no history accompanied them, and they only speaking Spanish, a language of which I was unfamiliar, except for the words, "Si, si, Señor," from a song sung by Fred Stone, in "Jack o' Lantern." Therefore I had to present many of my findings unaided. I am passing among you a film, showing a large renal calculus that was causing only slight symptoms,

\*Read in Section on Genito-Urinary, Skin Diseases and Radiology, Annual Meeting, Oklahoma City, May, 1920.

such as hematuria, on riding horseback. You will note that it fills the dilated kidney pelvis and illustrates the size stones attain before being suspected. Diagnostic renal radiographs should show kidney outline. The outline of the lumbar muscles transverse process of lumbar vertebrae plainly. Thorough purging, preferably by castor oil, followed by enemas is necessary to clear the intestinal tract of confusing shadows and make a clearer plate. When the kidney outline can be seen, definite information can be given the surgeon, regarding the size, location, and number of stones, and he should be guided by this information in his treatment. Stones are often multiple and often bilateral. They also are prone to recur.

Tuberculosis of the kidney is difficult of diagnosis by x-ray, although in certain long standing cases calcareous material is present, which is diagnostic of this condition; when the material is dense enough to cast a shadow it is diffuse and grainy, unlike any other shadow. A particular case in a Porto Rican soldier with symptoms of frequency, hematuria and lumbar pain was definitely diagnosed as renal tuberculosis, before other clinical tests were made, later confirmed at operation.

Gastro-intestinal examinations may also be utilized in cases of tumors, of unknown origin, to determine their relation to the gastro-intestinal organs, as illustrated in the case of an American officer, with a large left sided mass. He was sent in for a gastro-intestinal examination. The findings indicated that the mass was retro-peritoneal, but no diagnosis was made. Upon operation a large hypernephroma was revealed.

Braasch and others in recent years have developed pyelography, using opaque substances such as thorium, nitrate 15%, collargol, and other silver salts. Later Cameron used with success sodium bromid, potassium and sodium iodid, having found that they answered the same purpose. The injection of these substances through urethral catheter gives valuable aid, as to the size, shape and position of renal pelvis, dilations, obstructions, locations of calculi, etc. These should be used cautiously, as damage may be produced by this foreign substance. E. H. Weld, in a recent article concludes that sodium bromid is the safest of the solutions used today. He demonstrates that renal absorption does occur and mainly through the medullary portion of the kidney. He thinks that the greatest dangers incident to pyelography are use of insoluble media, use of a poisonous media when it is absorbed, and injection under too much pressure. Usually 5 to 8 cc. of solution will give all the information necessary, except in cases where kidney pelvis is dilated, or other pathology

exists. Pain should be given and particular consideration in determining the amount of solution to be used. Clinical history of a recent case might be of interest to demonstrate the aid of the x-ray in obscure cases:

A woman aged twenty, married, health good up to two years ago, and since then had indefinite pain in back. Family history negative, associated with no tuberculosis, menstrual history normal, no pregnancies, appetite poor, no extensive loss of weight, and no venereal disease. Admitted complaining of pain in left lumbar region. Fullness left lower quadrant, no tenderness on pressure. Temperature 100; respiration 20; red cells 4,000,000; white cells 22,000; hemoglobin 80; urine—calcium oxalate crystals, and epithelin.

April 20, 1920—24 hr Spec. 34 oz. Spec. Grav. 1020. Phenolsulphonephthalein test, Intravenous, 25% 1 hr. April 21, 1920—24 hr. Spec. 45 oz. Spec. Grav. 1016. Phenolsulphonephthalein test, intravenous, 35% 1 hr. April 22, 1920—24 hr. Spec. 52 oz. Spec. Grav. 1016. Phenolsulphonephthalein test, intravenous. April 23, 1920—24 hr. Spec. 49 oz. Spec. Grav. 1016. Phenolsulphonephthalein test, intravenous. April 24, 1920—24 hr. Spec. 48 oz. Spec. Grav. 1018. Phenolsulphonephthalein test, intravenous, 40% 1 hr. April 25, 1920—24 hr. Spec. 68 oz. Spec. Grav. 1016. Phenolsulphonephthalein test, intravenous. April 26, 1920—24 hr. Spec. 46 oz. Spec. Grav. 1016. Phenolsulphonephthalein test, intravenous, 40% 1 hr.

Ureteral catheterizations show on two occasions that the left kidney excreted about one-tenth as much as the right kidney.

Phenolsulphonephthalein test, 1 hour, right kidney 25% intermuscular.

Phenolsulphonephthalein test, 1 hour, left kidney —% intermuscular.

Pyelograms showed kidney pelvis about equal size, shape and position, about normal; no stones were seen. Below the left kidney large oval shadow about the size of large grapefruit demonstrated. Thought to be "cold abscess," mass was below left kidney margin, and apparently not continuous with the kidney. No spinal caries could be detected on this examination. Operation decided upon usual kidney incision, with retro-peritoneal dissection made, and large abscess drained. Guinea pig inoculations with ureteral specimens showed no tuberculosis, as well as laboratory findings being negative. Twenty-four hour specimens of urine averaged 55% functional test, first hour for the next week. The patient is improving rapidly to date. Subsequent radiographs (some of these are being passed among you) reveal extensive destruction of the eleventh and twelfth dorsal vertebral

bodies, thereby marking them as the site of tubercular infection. Another ureteral catheterization and functional test will be made to determine whether or not relieving pressure will influence the function of this kidney, and so thereby determining its fate.

The ureteral catheterization was done May 16, 1920, with the result that the right kidney showed 30% phthalein, and also the left kidney showed 30% phthalein the first hour, showing an equal function. Working on clinical findings alone, this kidney might have been removed as the source of infection. Being able to demonstrate a spinal pathology by the x-ray has saved it for the time being.

Ureteral calculi can be detected by x-ray and may be confused with phlebolithiasis, calcareous concretions in intestinal tract, prostatic calculi, and calcified glands, the opaque catheter rendering aid in this regard, by the shadows coinciding with the catheter. Ureteral calculi can be rayed at intervals and their passage down the ureter detected. Collargol may be used to intensify the shadow cast by a ureteral calculus. Nephroptosis can be detected.

Hydronephrosis may often be shown by the pyelograph by a smooth, distended pelvis, absence of stones, whereas in tumors, or pyonephrosis, shadows are irregular and rough.

In my service I had many cases in middle aged persons clinically diagnosed as pyelitis, showing albumin and extensive symptoms, in which roentgen examination showed presence of gall-stones. Some of these cases after the removal of gall-bladder and stones showed much improvement. This may be a common finding, but I have noted very little literature on this point.

#### Discussion.

*Dr. M. M. Roland, Oklahoma City:* Mr. Chairman, it is well known by the members of the section here that we have shown the diagnostic work from the record standpoint. Some few months ago, however, before that we had had some experience along this line of work. Dr. Ming and I had the pleasure of spending part of our army service in New York in the same work. His paper has covered the important points in differential diagnosis from the record standpoint.

In the right hypergastric region there is an area of say three and three-quarters or four inches across which, passing through the body from anterior to posterior, it takes in a number of organs which enter into differential diagnosis. In the upper right hypergastric region if you will call to mind there is the pyloric end of the stomach, the duodenum, the right end of the pancreas, the common ducts, the right kidney, the flexure, the gall-bladder, are all to be found just in this little area of three or

four inches in diameter, and it is not infrequently that the physician or the surgeon must arrive at a diagnosis in this region by exclusion, and certainly the x-ray is one of the means of exclusion when it comes to the diagnosis of a trouble in the stomach and duodenum and the kidney and occasionally that there are positive findings in the gall-bladder and in the ducts, on that special point the x-ray is of a great deal of value in differential diagnosis.

I enjoyed Dr. Ming's paper and will enjoy being with him after our happy associations sometime in the past.

#### X-RAY AND RADIUM TREATMENT OF CARCINOMA OF THE UTERUS.\*

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At the beginning of the use of x-rays in the treatment of malignant diseases the first great obstacle was the unsatisfactory means of producing the ray in sufficient quantity to be of much value, as well as in the matter of computing dosage. These difficulties having been, in a way, overcome, the next great problem was that of convincing the medical profession that it had any merit in this capacity. In a few years even with very primitive technic, the destructive action of the rays upon malignant cells was no longer disputed.

At first the most important results were obtained in superficial work, namely: in the treatment of epitheliomata. When the real action upon superficial growths was established, the anxiety grew more and more intense to make use of radiation in the treatment of the deeper malignancies, chief of which are those of the breast and uterus.

The discovery that the rays of radium have a similar effect upon cancer that the x-rays have, was a long step in the direction of successful treatment of these deep seated growths. The chief advantage that radium has over x-rays in the treatment of uterine carcinoma is in its applicability to the seat of the disease and its greater penetrating powers.

At this stage of development of radiotherapeutic technic we certainly believe that all operable cases, should be operated and followed by radium treatment at once and by the x-rays as soon after the operation as it is practicable to take the patient to the roentgen laboratory.

Inoperable cases should be vigorously treated by both radium and x-ray with the hope that a few cases may be benefited to the extent of making them operable, and in others at least

\*Read in Section on Genito-Urinary, Skin Diseases and Radiology, Annual Meeting, Oklahoma City, May, 1920.



retarding the growth and prolonging life. But it is hardly a fair test of the merit of any method to use it on moribund cases exclusively.

We have not treated a sufficient number of cases to reach any definite conclusions as to end results, but in the majority of those cases which were not hopelessly advanced we have had encouraging results, in the way of reducing the size of the tumor and decreasing the usual foul discharge and hemorrhage which are so characteristic of them.

Inasmuch as the amount of this kind of work has been gravely neglected by the bulk of radiotherapists, I beg to repeat from Dr. Pfahler's<sup>1</sup> review of the subject in his valued article, "Roentgentherapy in Gynecology." He quotes from Graff 102 cases in all, six treated with mesothorium alone or combined with radium. Seventy-three exclusively with radium, twenty-three with radium and x-ray. Of the 102 cases, 21 were operable, 21 were recurrences, and 60 inoperable. Graff's conclusions were that with radium and especially in conjunction with intensive x-ray treatment, greater improvement can be secured in operable cases than has ever been had by any other means. He states that many inoperable cases have been rendered operable and an occasional one would improve to such a degree that it was impossible to diagnose carcinoma, but that there might be recurrences in some of these. Also, he quotes from Greber's report of 100 cases of carcinoma, 84 of the uterus and 16 of the breast, treated with mesothorium and x-rays, in which 59 operable cases of uterine carcinomata, some treated with mesothorium and some with x-ray, 14 were cured (that is to say, no carcinoma could be demonstrated clinically), 15 died, 5 discontinued treatment, 5 grew worse, and of the remaining 20 most of them were markedly improved. Of the 100 carcinoma cases, 32 seemed to be cured at the time of the report.

He further calls attention to the views of Flateau who advocated the substitution of radiotherapy for operation. Flateau had not done a radical operation for carcinoma cervicis since 1913 and after one and a half years experience concluded that beginning foci of carcinoma are completely eradicated by radium and x-ray treatment and that such treatment never stimulated the growth of such malignancies. He stated that during the time given that he had a greater number of cures from radiotherapy than he had in the corresponding period from performing radical operations. Dr. Pfahler believes that in general we can expect improvement in practically all cancers of the uterus from the combined treatment with radium and x-ray. In some cases we may get complete disappearance of the symptoms and in a few perhaps a cure.

A review of the lymphatic system of the uterus and its adnexa is in brief about as follows.

The uterine lymphatics arise from three capillary networks, namely: the mucous, muscular and peritoneal, one arising from each of the layers of the uterus as their names imply. The trunks from these networks all assemble on the surface of the uterine muscle in the subperitoneal cellular tissue, where they form a fourth network from which the collecting trunks start. The networks of origin in the body and cervix are continuous.

The cervical collecting trunks converge toward the lateral portion of the body, these collecting trunks vary in number from five to eight and here twist or assemble themselves so closely that they may be mistaken for a gland especially in the pregnant uterus. These cervical collecting trunks form three pedicles: The first runs outward and upward to end in the middle chain of the external iliac group of glands. Second, passes obliquely upward and outward and backward and terminates in the hypogastric gland which is usually on the anterior terminal trunk of the hypogastric artery. The third pedicle drains the posterior surface of the cervix and after descending upon the vagina runs backward and terminates in the glands of the promontory and lateral sacral.

The principal pedicle draining the body of the uterus is formed by five trunks which form beneath the cornu of the uterus and ascend backward and upward to just beneath the hylum of the kidney where they make a sudden downward curve to terminate in the juxta-aortic gland and to a less extent in the prae-aortic glands. The two accessory pedicles pass one to the external iliac glands, the other to the superficial inguinal glands.

The ovarian lymphatics are very conspicuous for their great numbers. The plexus begins at the hylus and gradually coalesce into four, five or six trunks which follow the ovarian vessels upward and exchanging anastomoses with the trunks from the fundus of the uterus about the fifth lumbar vertebrae and terminate in the lumbo-aortic group of glands. There is also a trunk which passes outward to terminate in the internal iliac group.

The fallopian lymphatics form from three plexuses, one from each of the three layers much the same as those of the uterus. They form trunks and unite with those of the ovary and share in their terminations.

This brief review of the lymphatic system of the pelvic generative organs is for the purpose of defending the advocates of the combined x-ray and radium method of radiotherapy, in uterine cancer. If we have in mind the rich lymphatic system and its thorough anastomoses, it is quite obvious that metastasis

may not follow any constant course, and that the entire pelvis must be as thoroughly radiated as possible.

Intensity of light emanations from a point varies inversely to the square of the distance from a given plane to the point of emanation. The tissue then nearest the point of emanation will receive the greatest amount of raying. This being the case, it reasonably follows that the pelvis can be more thoroughly rayed by sources from within outward, and from without inward, than it can be by either of the sources alone.

### Conclusions.

First: That all cases of cancer of the uterus should be operated when operable.

Second: That all operated cases should be followed up as soon as practicable after operation with radiotherapy.

Third: That the radiotherapy should consist of both radium and hard x-ray applications.

Fourth: That all inoperable cases should be treated heroically by radiotherapy in an effort to render them operable.

Note: (1) Geo. E. Pfahler, M. D., "Roentgentherapy in Gynecology," *Amer. Jour. of Electrotherapeutics and Radiology*, May, 1919, Vol. xxxvii, No. v., p. 431.

### PNEUMOPERITONEAL ROENTGEN-RAY DIAGNOSIS.

Arthur Stein and William H. Stewart, New York (*Journal A. M. A.*, July 3, 1920), elaborate on their former report and detail the technic employed to show distinctly the parenchymatous organs themselves and their mutual relations as well as pathologic changes of these organs, and their experience with the application of this method of abdominal inflation for roentgenographic purposes. The procedure has been utilized in eighty cases, and without untoward effects. The list includes patients varying in age from 4 to 74 years. The authors believe that the method should be reserved for those obscure cases in which a clearer outline than that which can be secured under the ordinary roentgenographic arrangements is desired.

### CURE OF PANCREATIC FISTULA BY ROENTGEN RAY.

Two cases of pancreatic fistula under Robert M. Culler's observations (*Journal A. M. A.*, July 3, 1920), have permanently closed after treatment by the roentgen ray. They are reported for the information of those likely to encounter such conditions. No attempt is made to explain this action of radio-activity, which was used in these cases in the purest empiric manner. If the application of the roentgen ray inhibits pancreatic secretion, the reason for the favorable outcome in both cases is plain.

### THE IMPORTANCE OF RADIOGRAPHY IN INFANCY AND EARLY CHILDHOOD.\*

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OKLAHOMA CITY, OKLA.

In order to save time I will merely show a few plates to try to demonstrate the importance of the x-ray in early childhood. Must confine these to cases that will show up at a distance, which will eliminate lungs, mastoids, etc.

1. Plates of osteomyelitis are of value to demonstrate the greater amount of involvement than was expected from the physical signs. Also the stage of involucrum and sequestrum formation is an absolute index to the resistance of the patient, helping the surgeon to give a more accurate prognosis, and to determine the method of operating. This film shows a case with marked sequestrum formation, indicating that the patient is now resisting the infection very well and should make a good recovery. In this case there was some doubt as to whether the knee was involved to any great extent, showing that the x-ray reveals more than was expected.

2. This case is of a child about one year old. Marked distension of abdomen with fluid. Abdomen tapped and oxygen forced in to take the place of the aspirated fluid. On account of the great amount present it was not considered advisable to draw off more at this time, so we did not get as much information as might have been obtained with the fluid level lower. Patient removed from hospital before another aspiration could be made. This film has the appearance of a cyst.

3. This case of Dr. Long. Elephantiasis with the interesting complication of increase in all dimensions of tibia and fibula. It would be interesting to hear some explanations for this.

4. You all know the value of the x-ray to determine the presence and position of an encapsulated empyema. These of course sometimes require several examinations and quite often it is necessary to inject barium or bismuth.

5. In obstetrics it may be helpful to determine the size and position of head, etc.

6. Case of hypertrophic stenosis of pylorus. It should be mentioned that this diagnosis was made before patient was radiographed. It is of interest to determine the amount of meal getting by the pylorus. First film made about twenty-five minutes after barium was given. Second, six hours later showing about one-tenth in small intestines.

7. Perthes disease can absolutely be differentiated from tuberculosis by the characteris-

\*Read in Section on Pediatrics and Obstetrics, Annual Meeting, Oklahoma City, May, 1920.

tic shortening and broadening of neck with greater angle formed by neck and shaft.

The differential point from a radiological view between syphilis and rickets, is the thickened cortex on the convex side of the bone in syphilis and on the concave side in rickets.

### ERGOT IN TYPHOID.

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The discussion of drugs used in the treatment of typhoid fever is very broad, but the purpose of this paper is to emphasize the importance of controlling certain symptoms that give the physician a great deal of worry, in addition to anxiety and criticism among our clientele, the laity.

First of all, there are no specific drugs to be used and secondly, it must be remembered that it is a disease that in all cases will run a special course.

Ergot, a long used drug, the active principle of *Claviceps Purpurea* Tulasne, replacing the grain of rye. The active constituents are not definitely ascertained. It contains, however, an acid soluble in water and variously termed, sclerotinic, ergotinic and ergotic acids, and another soluble in alkalies, known as spacetric acid, both of which possess ecboic properties.

In typhoid fever, the nervous system gives rise to certain symptoms complex, viz: headache, vertigo, restlessness, insomnia, muscular twitching and delirium, the latter of which may be manifested by mild or severe delusions to the extent of causing the patient to leave his bed, noisy, or he may lie somnolent, soliloquizing in a low whisper or so-called typhomania, which may gradually give place to coma, about the close of the second week.

All of these symptoms, mild or severe, can be controlled to a great extent by the administration of ergot. The preparation used by the writer is the most simple one, the fluid extract, given in one (1) dram doses every four (4) or five (5) hours for adults and the size of dose in proportion for children. Where there is marked delirium and it cannot be given by mouth, a thorough flushing of the colon with normal salt solution, after which one (1) to two (2) drams of the fluid extract may be given in combination with six (6) to eight (8) ounces of warm black coffee, instilled, per rectum. In other cases ergotol may be given hypodermically, but not with as gratifying results.

#### Dangers.

Gastro-intestinal irritability, depression of the cardio-vascular and respiratory system, gangrene and in pregnant women, colic, abortion and hemorrhage.

### THE WASSERMANN REACTION. AN APPEAL FOR STANDARDIZATION.

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The technic of the Wassermann reaction is so complicated, and so many elements of error enter into its performance, that unless every precaution is taken and every possible check made, conflicting and confusing results will inevitably occur.

In 1901 Bordet, working with plague bacillus, announced the results of his experiments with complement fixation, and showed how the test could be applied to determine the presence or absence of specific antibodies in a serum, or having a known specific serum, the identity of unknown organisms. It was by this method that he established the etiological relationship of bacillus pertussis to whooping cough. In these experiments emulsions of bacteria were used as antigen. In 1905, Wassermann and Bruck discovered that extracts of bacteria could be substituted for the emulsions. About this time Schaudin and Hofmann demonstrated the spirocheta pallida in syphilitic lesions, and in 1906 Wassermann and Bruck applied the complement fixation test to the diagnosis of syphilis. Their first antigens were aqueous extracts of chancre, condylomata, and luetic placenta. Just two weeks after their announcement Detre published his results with extracts of syphilitic liver, pancreas and tonsillar exudates as antigen. He found the reaction positive in two out of six cases of syphilis, or 33 1-3 per cent. Later in the same year Wassermann, Neisser and Bruck applied the test in 257 cases of syphilis with 49 positive results, or 19 per cent. At this time the reaction was considered a specific one from an immunological standpoint.

In 1907 Weygandt reported a positive reaction in a case of tabes by use of an aqueous extract of normal spleen as antigen. Levaditti secured positive reactions in the spinal fluid of paretics by the use of extracts of normal fetal liver. Later in the same year it was announced that antigens prepared from guinea pig hearts gave results equal to or superior to those prepared from syphilitic tissues. These results indicated that the reaction is not a specific one.

#### Nature of the Test.

The real nature of the Wassermann reaction is not understood. Proof of its non-specificity is abundant, and in this respect it differs from the classic Bordet-Gengou reaction, which depends upon the absorption of complement by a



specific antigen and its antibody. Many theories have been advanced to explain the reaction, but none of them are capable of definite proof. There seems to be a sort of antibody production as a result of infection with the spirochete; not an immunological reaction as in the case of other infections, but the result of injury to tissue cells by the organism, liberating substances capable of absorbing complement in the presence of lipoidal mixtures. These substances, whatever their nature, are not liberated to an appreciable degree at least in other conditions than syphilis with the possible exception of frambesia and leprosy, and occasionally perhaps in a few other diseases, when they appear temporarily. So that while the reaction is a non-specific one from an immunological standpoint, it becomes indeed a highly specific one from a diagnostic standpoint.

Noguchi and others have demonstrated that a true antibody is formed in syphilis, and that it is capable of giving a true Bordet-Gengou reaction; but as it appears late in the disease and persists after treatment, it is of no diagnostic importance.

#### Importance of the Wassermann Reaction.

The fact that the Wassermann reaction has survived so many years of blundering technic is sufficient evidence of its value. Kolmer says, "The Wassermann reaction serves two important purposes: (1) as an invaluable aid in diagnosis, and (2) as a guide in the treatment of syphilis." The reaction is a symptom, and when so regarded, it has an extremely important place in the practice of medicine. Few symptoms are pathognomonic; few are so constantly present as in a positive Wassermann in syphilis, and few have so small a percentage of fallacies. A positive reaction is more valuable than a negative, just as any other symptom is more valuable when present than when it is absent. Just as any other symptom does not appear for a variable length of time after the onset of the disease, disappears after a period, and may not be elicited under certain conditions, so a positive Wassermann may not be constantly found in syphilitic infections.

The following figures from Craig, based upon more than five thousand tests, do not differ materially from those of other workers.

Stage of the disease	Percentage of positive reactions
Primary	89.8
Secondary	96.1
Tertiary	87.4
Latent	68.1
Congenital	82.2
Parasyphilitic	68.1

In other words a positive Wassermann is found in about 86% of syphilitic conditions.

As to the time of first appearance of a positive reaction Craig found the serum positive as follows: First week, 36.3%; second week, 59.3%; third week, 69.9%; fourth week, 77.2%; fifth week, 81.3%. From this it is seen that the test may be a very material aid in diagnosis in the primary stage of the disease, while Craig reports 96% positive reactions in more than two thousand cases of secondary syphilis. Boas 100% positive in 437 untreated cases, and Kolmer states he has had similar results.

It is in the tertiary stage of the disease where the Wassermann plays the most important role in diagnosis. In untreated cases positive results will be obtained in from 75% to 80% of cases, while some workers report as high as 96%.

In general paresis the serum reacts positively in nearly 100% of cases, while the spinal fluid gives a positive reaction in about 90%; in tabes the serum gives about 95% positive results while the spinal fluid reacts in about 60%. In cerebral syphilis there is a smaller percentage of positive reactions, both in the blood and in the spinal fluid.

In latent syphilis a positive Wassermann is sometimes the only indication of the real condition; therefore, the value of the test cannot be over-estimated in this condition. From a therapeutic standpoint also the test is most important in this stage. Many cases treated years ago with mercury and discharged as cured give a positive reaction, and in many individuals having had specific treatment a positive Wassermann may be the only indication for continued treatment.

While about 82% of cases of congenital syphilis react positively, much depends upon the time at which the specimen is taken. Many of these cases give a negative at birth and later develop a positive, while a few who show a positive reaction at birth may never show any signs of syphilis. Most of those having a positive Wassermann at birth develop signs of syphilis, while a majority of those giving a negative at birth remain healthy. Again, the Wassermann test has proved that "apparently healthy mothers giving birth to syphilitic children and suckling them without themselves becoming infected" (Colles' law) are in reality latent syphilitics, while "apparently healthy children of syphilitic mothers who cannot be infected by the mothers" (Profeta's law) are really cases of retarded congenital syphilis. In other words, children born to syphilitic parents are not immune, nor do healthy mothers give birth to syphilitic children. On the other hand, however, syphilitic parents may have perfectly healthy children.

### The Specificity of the Test.

As mentioned above, the Wassermann reaction, although not a specific one from an immunity standpoint, is in reality one of the most specific of all symptoms. While it is present in about 86% of all cases of syphilis, in this part of the world its presence due to other diseases need scarcely be considered. It is true that a positive reaction is sometimes found in a few other conditions, but the clinical findings in these diseases are usually so definite that a diagnosis is easy. It seems probable that a positive reaction may be found in frambesia (yaws), and in nodular leprosy. Yaws is caused by an organism almost indistinguishable from the spirocheta pallida; and when we consider that leprosy is for the most part found among the class of individuals most prone to syphilitic infections, we may question whether the reaction may not be due to a complicating luetic condition. Positive reactions are also found in some cases of relapsing fever.

Some workers have reported positive Wassermann reactions in cases of tuberculosis. The writer has never seen a case of tuberculosis giving a positive reaction where syphilis could be ruled out. The same may be said of malignant tumors and of pellagra, although Fox and Bass have reported occasional positive reactions in pellagra. Craig and also Thompson have noted positive reactions in blood drawn from malarial patients during the febrile stage; others have noted it in pneumonia and in scarlet fever, while the writer has observed a strong positive reaction in one or two cases of profound sepsis; but in these last conditions the reaction is only temporary, so that syphilis is easily excluded. In four thousand tests made on individuals suffering from various diseases other than syphilis, Craig found positive reactions in only 0.3 of 1%.

### A Reaction.

In the early days of sero-diagnosis the Wassermann test was hailed as a most important and specific diagnostic one. It was placed in the hands of untrained technicians everywhere with the result that positive reactions were reported in every known disease. Along with this came the announcement that the reaction is a non-specific one. A reaction set in and for several years the Wassermann was in great disrepute. Thanks to the able work of Citron and others, the test was not entirely discarded. The technic was refined and modified; the underlying principles became better understood, as did the limitations of the test. The Wassermann gained in prestige. It assumed a most important place in diagnosis; practitioners accepted it at its face value; it was considered the

last word in diagnosis; it had become an absolute test. It did not occur to the average man to check the findings of one laboratory against those of another; he did not always check them against his own judgment.

This was unfortunate.

In recent years many laboratories have sprung up. Every hospital, every clinic, every small city has its clinical laboratory. It is easy to have a Wassermann made. The laity have learned to what extent the doctor relies upon a blood test.

A patient goes to a physician for some complaint. The doctor sends out a specimen of blood, receives a positive report; the patient doubts, goes to a different laboratory of his own initiative, and receives a negative report. Or he goes to another physician who patronizes a different laboratory, and the patient is declared free from syphilis. Which doctor shall he trust? Which laboratory is dependable, if either? Has the doctor been trying to "put one over on him"? A physician sends a specimen to a laboratory and receives a report that does not confirm his diagnosis; he sends a second specimen to another laboratory and receives a conflicting result. Both laboratories are conducted by efficient men. He sends a second specimen to the first laboratory and receives a report conflicting with the former report. The medical man is puzzled; he can understand how reports may vary by one point; but from a clear cut negative to a definite positive is too great a discrepancy. A serologist receives a specimen and gives a report; anxious to check his own work he sends a portion of the specimen to a neighboring laboratory, and is surprised to get a different report. The serologists begin to question; the physician begins to doubt the laboratory, and the value of the test; the patient loses confidence in the test, the laboratory and the physician himself.

This is not exaggeration. It is a plain statement of facts. All of this has occurred in my own experience within the month, many times within the year. This regrettable condition exists not only in our own state; it is found throughout the United States, and is constantly being mentioned in the literature of England, France, Germany, Australia, indeed, wherever the Wassermann test is done. Conscientious workers throughout the world are seeking a remedy. In the meantime a second reaction has set in. Whereas the Wassermann test was the last word in diagnosis, it is rapidly being relegated to the status of a confirmatory test, which, if it confirms, is good; if not, it is discarded as worthless.

This again is unfortunate.

### Factors Influencing the Wassermann.

What are the causes of the deplorable conditions existing today? Is the test worthless? Are the laboratory technicians responsible? Has it occurred to the average practitioner of medicine that there are other factors than these? If not, I wish to invite a careful consideration of the following paragraphs.

Ingestion of alcohol will render a positive serum negative. Experiments of Craig and Nichols, and since their observations, those of many others, prove that small quantities of alcoholic beverages will render the substances which are responsible for the reaction inert for as long as three days, so that during this period a syphilitic person may get a negative Wassermann.

It has been noted by many observers that persons just recovering from ether anesthesia may give a positive reaction, although they were previously, and again later, negative.

It has been reported by some that ingestion of food will alter the reaction; so that all specimens should be taken while the patient is fasting. A series of experiments is now being conducted in these laboratories to determine the correctness of these observations.

If blood serum is allowed to remain in contact with the red blood cells longer than twenty-four hours it is liable to become anticomplementary.

Nearly one cubic centimeter of clear serum is required for the test. Oftentimes minute quantities of blood are received, or specimens more or less hemolyzed. A satisfactory examination is impossible and laboratory workers should demand a better specimen.

Contamination of the serum with various organisms will render it anticomplementary, and experiments of Craig show that contamination with certain strains of staphylococcus and streptococcus may render a negative serum positive, while the writer has observed that severe septic conditions may give a positive reaction, although they were previously negative. A majority of specimens of blood received by the laboratories are contaminated.

In untreated cases of syphilis there are fluctuations from day to day in the amounts of complement fixing bodies, so that a slightly positive serum today may be a positive or a negative tomorrow; therefore a single negative result in a suspicious case should not be accepted as final, nor should it condemn the laboratory worker as unreliable.

During active treatment, or after a single intravenous treatment, a positive serum may react negatively for a variable period.

Recently Strickler published results of the experiments carried on by him and his co-workers which indicate that non-syphilitic

patients may react positively after a period of intensive arsenical treatment for other affections.

It has been known for years that cases of suspected syphilis with a negative blood may give a positive reaction after repeated large doses of potassium iodid (the provocative Wassermann).

Occasionally a patient will be seen whose serum will not give a negative reaction, however prolonged or intensive the treatment may be—the so-called "Wassermann fast" cases.

### The Physician's Part.

What can the practitioner do to aid in the attempt to render the Wassermann test more reliable? If he will follow the following simple directions, bearing in mind the facts laid down in the preceding paragraphs, he will have done his part, and half the disagreeable features will have been eliminated.

1. Avoid taking blood during or immediately following ether or chloroform anesthesia, or for several days after the ingestion of alcohol.

2. Avoid taking the blood for at least two weeks after intravenous medication.

3. Take specimen preferably in the morning before patient has eaten.

4. Draw at least 5 cc. of blood in a vacuum tube, or with a sterile syringe which has been rinsed with physiological saline solution and place in a tube similarly prepared; do not force blood out of syringe with too great force as the red cells may be broken up. This procedure will prevent hemolysis and contamination.

5. Send to nearest dependable laboratory by *special delivery* at once; if laboratory cannot be reached in twenty-four hours, centrifuge specimen, or let stand in ice box until serum separates, pipet off clear serum and send by special delivery.

6. All specimens must be uncontaminated and unhemolyzed.

7. Do not be content with a single negative report, keeping in mind the fluctuations in amount of complement fixing bodies in some cases.

8. Remember that some 15% of syphilitics do not give a positive Wassermann.

9. Remember there are some patients Wassermann fast.

A second article will deal with the work of the Oklahoma Serological Association.

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A jury recently met to inquire into a case of suicide. After sitting throughout the evidence the twelve men retired, and after deliberating returned with the following verdict: "The jury are all of one mind—temporarily insane.—*San Francisco Chronicle*."



PROCEEDINGS OF OKLAHOMA CITY  
CLINIC, ROUND TABLE,  
WESLEY HOSPITAL.

**Dr. A. L. Blesh:** *Menorrhagia—Cause Undetermined—Radium in the Treatment of.*

Mrs. J. H. F., age 36. Family history negative. Menstruation, which began at 12 years of age, has been normal up to six months ago. At this time began intermenstrual bleeding with tendency to "spotting" but no pain and no mal-odor. She is the mother of two children, the older sixteen, the younger eight years old. Suffered perineal and cervical lacerations which have not been repaired. No weight loss. Appetite good, digestion undisturbed, sleeps well.

The patient is a well nourished woman, presenting no evidence of cachexia though somewhat anemic, pulse 100 (patient excited), temperature 99 1-3. Glandular system chest and abdomen negative. Pelvis negative except for moderate lacerations of cervix (without erosion) and perineum. Cervix showed no tendency to bleed upon touch. Uterus not enlarged to any appreciable extent. Wassermann negative and no clinical evidence of syphilis.

Diagnosis, menorrhagia, cause undetermined. Puerperal lacerations. Advised diagnostic curettage and repair of lacerations, radium.

Operation September, 1920. Curettage. Immediate report from laboratory negative for malignancy. Fifty milligrams radium, 300 mg. hours. No reaction.

September 24-20. Lacerations repaired and parings examined for malignancy. Negative.

January 6, 1921. Patient reports by letter complete relief of menorrhagia. Menstruation normal and the disappearance of distressing leukorrhea.

Mrs. A., aged 44. Applied July 23-20 for relief from an unusually severe menorrhagia which had begun a year ago and had been continuous ever since. She was markedly anemic but nutrition was good. She manifested no menopausal phenomena. There had been no "spotting." Present quite extensive perineal and cervical lacerations. Mother of five children, all living and healthy. Uterus large. Physical examination otherwise negative. No pathologic reason found for menorrhagia.

Diagnosis, menorrhagia, cause undetermined, puerperal lacerations.

Advice: diagnostic curettage, radium, repair of lacerations with microscopic diagnosis of curettings and parings of cervix.

Operation July 24-20. Curettage, repair cervix and perineum. Laboratory report on both specimens negative for carcinoma. July

29-20. Irradiation by x-ray, one seance over each ovary.

November 3-20, Patient returns with statement that past two menstrual periods have been quite scanty and painless and of two days duration but that five days ago she had a profuse flow which was ahead of her regular time. Is feeling fine.

November 3-20. 50 mg. radium, intra-uterine, 775 mg. hours. No reaction.

January 13-21. Reports two normal menstrual periods. General health excellent.

Stacy sums up indications for irradiation as follows:

1. Cases of menorrhagia of menopause not associated with large fibroid tumors and in which the possibility of carcinoma is definitely eliminated.

2. Cases of menorrhagia in patients between the ages of 35 and 40 years who have small sub-mucus fibroid tumors, or who have no demonstrable lesions.

3. Cases of myomas in which there is a condition making a definite contra-indication to operation.

4. Cases of menorrhagia in the young person who has resisted all medical treatment in which very small dosage should be given.

In addition I would add cases of menorrhagia in which no definite cause can be assigned within the limitations of one and four.

**Dr. J. Z. Mráz:** *Unusual Case of Urethral Stricture.*

Mr. W. E. S., age 44, referred by Dr. W. M. Wallace. Family and personal history negative. Present trouble: 24 years ago had gonorrheal urethritis. Discharge continued for about six months. While still discharging developed stricture at meatus which was cut by his doctor. About twelve or fifteen years later patient developed some burning on urination with dribbling of urine following act. Stricture was diagnosed by doctor who proceeded to attempt to pass a large sized bulbous bougie. Bougie failed to pass and free bleeding resulted. Urinary symptoms continued and stream grew progressively smaller. No instrument of any kind has been passed in within three years, and patient has had several attacks of temporary complete retention, associated with chills, fever and prostration. He obtains relief by rest, hot sitz bottles and sweats. States that sweat has marked urinous odor at these times.

Febrile attacks have been diagnosed and treated variously by different doctors. After thoroughcocanization of urethra and failure to pass any kind of sound, a filliform bougie was finally passed into bladder and stricture

dilated with No. 14 and 18 F. followers. This is to be repeated in twelve days and followed with sounds. Stricture at meatus required cutting.

The point of interest in this case besides the long duration and ability of patient to relieve complete retention, is the fact that no doctor excepting Dr. W. M. Wallace, who referred him, associated the attacks of chills, fever and prostration with the back pressure of urine caused by the stricture and the consequent septic absorption.

The case must be considered as similar to that of an old prostatic with retention, cystitis and secondarily, pyelitis with this difference: in the prostatic there is more or less residual urine continually in the bladder, while in the case of stricture the patient is able to empty the bladder completely when he is able to urinate at all. For this reason, we do not see the severe grade of cystitis due to alkaline decomposition of the residual urine and subsequent infaction in stricture that is nearly always present in old prostatitis. This explains why, in the present case, the patient felt entirely well in the intervals between complete retention. It was only at the time of complete retention with urinary back pressure that he had any septic symptoms, probably due to the lightening up of a latent pyelitis.

**D. D. Paulus, M. D.:** *Case of Interlobar Empyema.*

Boy age 16. As child had measles, mumps, and whooping cough with good recoveries. Had an attack of pneumonia at 10. Has had four other attacks of pneumonia since, including present attack. Otitis media at 7. Also had tonsils removed at that age. Never a very strong boy, always coughs more or less.

Present illness began with an attack of bronchopneumonia five weeks ago during which temperature ranged from 99 to 103. Sputum was blood streaked during attack. Out of bed two weeks ago but in a few days developed temperature again which has ranged from 99 to 102. Feels quite weak. Coughs a good deal but sputum is not so free. Has lost a great deal of weight. Physical examination: Temperature 102, pulse 120. Pale and anemic looking boy. Tonsils removed, teeth all right. Glandular system is negative. Heart, dulness one-half inch to left of nipple line, no murmurs. Chest: decreased expansion right side. Slight respiratory movement lower right chest. Dulness and decreased breath sounds above angle of right scapula posteriorly. Flatness over area, half size of hand anteriorly above level of fourth rib with absent fremitus and breath sounds.

Urine: acid 1010, albumen trace, otherwise negative. Leukocytes 17600.

X-ray: Fluoroscopic examination shows very

dense shadow outline just above fourth rib and extends from anterior axillary line to edge of sternum with convexity downward. The apex shows shadow of far less density. No shifting of shadow outline at its lower border except that shadow outline seems like a small sized cannon ball rolling back and forth.

Exploratory puncture was made in fourth interspace mid-axillary line anteriorly and pus encountered. Operation was rib resection of fourth rib which just reached the bottom of pus cavity. This case I believe was an interlobar empyema between upper and middle lobe on right side which came to the periphery of lung and produced a localizing empyema. The young man is convalescing normally.

**Dr. J. C. Macdonald:** *Carcinoma of Antrum.*

An interesting case was a man 49 years old who dates his present trouble one month previous to entering hospital and complained of pain on left side of jaw which he thought was due to a wisdom tooth. Two days after pain began a swelling appeared at angle of left jaw.

Two weeks before entering hospital he had wisdom tooth removed but condition is worse. Now has cellulitis of neck with a softened area under angle of jaw. This was lanced with discharge of much pus. A small piece of tissue was removed from area of wisdom tooth where small growth was seen. This was found to be an extension from antrum on that side. Microscopic examination showed it to be carcinoma. Wassermann showed 4 plus positive. Due to the diffuse cellulitis present, cautery and radium treatment were not carried out. Temperature ran rather high and patient was quite toxic. Three weeks later the patient had an attack of cerebral hemorrhage due to arterio-sclerosis resulting from the syphilitic process. This patient had other evidence of syphilis besides his Wassermann. Epitrochlear glands were palpable, liver was enlarged and the pupils unequal and reacted very slightly to light.

This case is extremely interesting because we have a carcinoma and syphilis in same patient and that patient died on account of syphilis and not carcinoma in spite of fact that he was given anti-syphilitic treatment soon after his entrance to hospital.

**M. E. Stout, M. D.:** *Cesarean Section for Placenta Praevia, and another for Contracted Pelvic Outlet.*

This week I have two cases of cesarean section to report.

First: Mrs. P., age 30, referred by Dr. Vann of Cement. Strong healthy woman, has had no serious illness. Mother of three children, two living and healthy, one died at two years of diphtheria. Labors normal and no complications except about four hours before her last

baby was delivered she began to bleed and the hemorrhage was quite profuse until the child was delivered. Has been strong and healthy since.

Menstrual periods have always been normal. Last period occurred May 16th, making her just a little more than  $7\frac{1}{2}$  months pregnancy, this being January 4th. All the symptoms of normal pregnancy, had intense nausea for three months, but no other complications or disturbances up to last Monday night, one week ago, when she wakened at 1:00 a. m., with a profuse hemorrhage. No pain or any other symptoms. Hemorrhage continued off and on for 36 hours, in spite of absolute rest and narcotics, and it has recurred in profuse quantities on four or five occasions from that day to this, until the patient is now quite weak and anemic.

The physical examination is negative except for that of pregnancy, and a vaginal examination was not made for fear of starting up more hemorrhage. There has been no pain or symptoms of labor, and the referring physician states that there was no dilatation of the cervix this morning. A diagnosis of placenta praevia was agreed to from the history alone, and after a three-hour rest under constant observation, a cesarean section was performed. The simplest method of opening and closing the uterus was selected. The mother suffered no shock or untoward effects from the surgery and is making an uneventful recovery. The baby is also manifesting perfect health up to date, though somewhat under size.

The second case, Mrs. T., age 24, referred by Dr. Coley and Bartlett of this city.

Family and personal history have no bearing on the present trouble. Primipara at full term normal pregnancy, had been in hard labor about seven hours, and Dr. Coley attempted a forceps delivery just before sending her to the hospital when he observed that the child was very large and the anterior posterior diameter was slightly flattened, an immediate cesarean section was done and a twelve-pound living baby delivered, but it died a few hours later. The mother suffered no inconvenience and is making an uneventful convalescence.

At this time I believe the profession is pretty well agreed that cesarean section is the safest course to pursue in all cases of placenta praevia providing there is access to a competent surgeon skilled in this work.

It is not such a difficult operation and one feels that he is master of the situation at all times, at least no patient should bleed to death from a cesarean section and one cannot feel so sure of this when delivery is attempted by any other means.

**W. W. Rucks, M. D.:** *Case of Vertigo due to Atheroma Labyrinthine.*

Patient, female, age 58. Personal history

negative. Had repeated attacks of tonsillitis when a child. At age of 9 injured left ear drum with knitting needle. Thinks she ruptured ear drum at that time. Had malaria when a young girl. Menopause at 45, no marked disturbance at that time. Never has been pregnant. Has not lost weight, appetite good, kidneys apparently act normal.

Present trouble started in June, 1920, with an attack of vertigo coming on suddenly, accompanied by nausea. During attack felt like objects in room were moving around towards left. Had another attack one week later producing similar symptoms. Another attack in September. Since then attacks have occurred more frequently until now she is rarely free from vertigo. Also occurs sometimes at night. When patient closes eyes, vertigo and sensation of moving objects ceases.

Physical examination shows rather phethoric woman, past middle life. Negative findings except for occasional extra systole and slight hypertrophied tonsils. Chest, heart and abdomen negative. Pelvic examination negative. Blood pressure, systolic 158, diastolic 90.

Dr. Macdonald reports eyes negative. Ears, right drum retracted. Hearing slightly impaired. Normal conduction. Caloric tests negative. Left ear, drum retracted, hearing by air conduction nil. By bone conduction normal.

Urine examination showed specific gravity 1030, slight amount of albumen, numerous hyaline casts, amount in 24 hours, 21 ounces.

Blood chemistry, non protein nitrogen 33, urea nitrogen 23, creatinine 1.2. Blood Wassermann 2 plus positive on two runs.

The principal symptom here is vertigo attended by nausea which is incapacitating her for ordinary activity. On physical examination the absence of evidence of chest, abdominal or pelvic diseases and undisturbed reflexes, lead me to rely largely on the symptoms of vertigo and inclines me to a diagnosis of labyrinthine disturbance, either inflammatory, hemorrhagic, or due to localized arterio-sclerosis in that area. The blood pressure of 158-90 and the urine analysis showing albumen and numerous hyaline casts leads me to believe that there is a localized arterio-sclerotic change in and about labyrinth.

The blood chemistry findings did not show a very great change from normal and are all within normal limits. The two blood Wassermann tests giving a two plus positive led me to give her 0.3 neo-salvarsan, and the next two blood tests showed the same result. However, my opinion is that the nephritis, the high blood pressure and localized arterio-sclerosis are the cause of her trouble. One might, however, give this patient anti-syphilitic treatment as a therapeutic test.



# THE JOURNAL

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### EDITORIAL

#### STATEWIDE ADOPTION OF SYSTEMATIC ANTIGENS FOR THE WASSERMANN TEST

With Observations of Commoner Sources of Clinical and Diagnostic Error.

Announcement of Dr. Wann Langston, Chief of University Hospital Laboratory, and closely associated workers that concerted attempt will be made to enlist the co-operation of every laboratory in Oklahoma to the end that identical and systematic antigens will be used in the Wassermann test, that practical, systematic technique and use of standardized substances wherever possible, should have the instant aid of every physician. That we have had too much carelessness, slovenliness, certainly occasionally brutal criminality, in the diagnosis and care of syphilis is believed by every observer.

It is fairly well known that various conditions of the patient when Wassermann specimen is withdrawn, seriously interfere with a true laboratory diagnosis, but those surrounding

facts are ignored too often for the real good of the victim. That many of these claims may be subject to argument and question has nothing whatever to do with the proper course the physician should adopt. Whether he believes or not that a patient saturated with alcohol may have a "negative" return when in fact he is highly infected, does not warrant imperilling the victim's chances for early treatment. Certainly there can be no reasonable objection to the rule of preparing the donor as far as may be in advance if the process is harmless. That a stomach overloaded with food may nullify the true findings has been for a long time the observation of Dr. C. E. Lee, a very careful and competent pathologist of Oklahoma City. That the Wassermann test is the greatest aid to diagnosis, that it is remarkably efficient in nearly all cases, should not merit the criticism of the thoughtless simply because occasionally it does not square with the facts clinically, that this result may be due to unknown conditions of the patient, individual characteristics, phenomena possibly yet unknown, faulty technique in handling the specimen from the very insertion of the needle to the final return, is well known to most men. On the other hand, the rare case giving, regardless of length of treatment its intensiveness, positive Wassermann, is to be regarded more as a freak than in any other light, then other clinical findings must be the guide.

That this infection is by far of paramount importance to every citizen, the grave concern of every person, that it may become his problem at any time, is appreciated by every competent student.

That thorough investigation and examination will disclose the infection present in an amazing percentage of people makes it the problem of all. Actual knowledge of conditions warrants the belief that probably from 25% to more than 50% of our servants, food handlers, hotel waiters, cooks, nurse-girls, etc., harbor the infection in various phases. Self protection from such sources is next to impossible. Evasion of the duty of every one to share the responsibility of reducing to the lowest point cannot be ignored or dismissed with deaf ear and closed eyes. That it stands out pre-eminent today as the Nation's greatest menace among destructive, avoidable, preventable, curable diseases, must be admitted and of all features in the program of handling, the good-faith, activity, sympathetic and systematic path of every physician must be admitted and accepted as our burden. Actual experience, however, based upon wide study and reliable investigations, show some of us in an unenviable light. The wide practice of the physician to regard this as something different from other diseases, terrorizing the panicky victim by

adding to his existing unbearable load of misinformation and belief that death is almost at hand, literal "high-jacking" him into paying unbelievable sums for treatment of simple procedure, but above all among the inexcusable, unwarranted mistreatments accorded the trusting patient, are those incident to sane, accurate diagnosis, before plan of treatment is determined. The writer is in a position unique as to opportunity for observing the neglect and lack of clearly indicated care due these cases. That the average physician will "sit up" for hours, make many visits to a case of simple obstetrics, undertake the grave responsibility of care of many infections for a pittance, and inconsistently place venereal infections, usually easy of care, responsive to any sort of common-sense care seemingly in miraculous manner, without the pale of sympathy, demanding the greatest fee obtainable, extending any charitable treatment or aid being among the rarities, is the true history too often related. In Muskogee, presumably in all other cities of the State, for we are all much alike, the victim commonly applying for free treatment, gives the experience of having been treated for many weeks, any sane step to diagnosis and simple treatment indicated by the case being unknown, but invariably having delivered in return for his inexcusable mistreatment, every penny obtainable. "Cure" for \$100.00 or more by "four" shots, is the story related too often to be without some foundation.

Treatment by a physician in any manner tending to place this disease in a category different from others, as a thing calling for drastic, Puritanical scorn and humiliation of the victim, has done more to place the entire problem of venereal infections upon the unreasonable plane now occupied. Such silly exhibits are unworthy scientific medicine, certainly not the part of good sense. The often observed allusion to "loathsome disease," "filth," etc., is without the slightest justification on any ground, announcement by a large number of physicians that "I do not treat such" is similarly untenable and without reason and is born of centuries of unsympathetic ignorance and misinformation. In nearly every case acquirement results from the inevitable search for that with which the Lord endowed every person, from manifestations of the most natural impulses. Certainly that should be regarded with no more severity than a case of typhoid, wherein the victim has eaten that whose habitat was and always is the filthiest organ of our anatomy, not forgetting the fact that the latter is so easily avoidable that its further existence in intelligent, clean, educated people, is now nothing if not a serious indictment as to carelessness and failure to take the simplest precaution. Now that we have not almost total

protective means as to venereal infections, for if we had such, we may be assured that those infections would be shortly a vanishing minimum, good sense and humanity demand that the medical profession lead the way to a proper appreciation and care of the victims. Selfishness alone demands that procedure. Our insane hospitals and jails would soon show a decrease if only the simplest honest care was extended to the infected. *The important element, however, ignored or neglected in any particular, swiftly rewards the patient and physician with tragedy and suffering, responsibility for which lies solely with the latter, is clear diagnosis of the condition, then sensible care, both returning more satisfactory feelings than their application to any other known condition.*

### *Abstracts, Observations from Current Medical Literature*

CONDUCTED BY

RADIOLOGY AND DERMATOLOGY—Dr. Chas. H. Ball, Daniels Bldg., Tulsa.

GENERAL SURGERY—Dr. M. E. Stout, Patterson Bldg., Oklahoma City.

ORTHOPAEDICS—Dr. Earl D. McBride, 208 Colcord Bldg., Oklahoma City.

EYE, EAR, NOSE AND THROAT—Dr. L. C. Kuyrkendall, McAlester.

GENERAL—INDUSTRIAL MEDICINE—PUBLIC HEALTH—Dr. L. A. Mitchell, Frederick; Dr. J. L. Austin, Durant.

#### GENERAL SURGERY.

M. E. Stout, M. D., Oklahoma City.

#### MANAGEMENT OF TOXIC GOITRE FROM SURGICAL POINT OF VIEW.

C. H. Frazier, Philadelphia.

(*Annals of Surgery*, August 20, 1920)

The author states that surgery is not only the safest but the most effective way of saving life and restoring health. His mortality was but a little over one per cent.

To him the most practical problems of toxic goitre is to determine the degree of toxicity. He lays great stress on the metabolic test, but states that the composite picture must be our guide as to what shall be the plan of action. He keeps his patients under observation for at least a week, studying out each system before determining what course to advise. He is very careful in his preliminary treatment and says that every available agency must be called into play in the nursing these patients back to health. For this, he relies principally upon rest in bed and ligation of the superior thyroid. He prescribes x-ray for the very toxic cases, but says that he has seen but very little effect from it.

He recommends against operating the profoundly toxic cases to prevent bringing surgery into disrepute.

He states that all medically treated patients are subject to recurrences and warns against advising a "course of medical treatment," calling attention to the degenerating changes which may take place in the vital organs during this period of procrastination, and takes a firm stand as to the propriety of early operation.

He does a preliminary ligation where there is the least doubt as to the propriety of a resection and all operations are performed under gas and the anoci technic.

### SPECIAL CONSIDERATION OF TOXIC ADENOMA IN RELATION TO EXOPHTHALMIC GOITRE.

Geo. W. Crile, Cleveland.

(*Annals of Surgery*, August 20, 1920).

The author states that he has noted following the removal of a simple goitre, that some patients have improved in general health beyond what one would anticipate from the mere removal of the enlarged gland. And after discussing the function of the gland he states that the various types of goitre are more or less toxic, that except for the exophthalmic, "toxic adenoma" may produce all the symptoms of exophthalmic goitre. That is increased metabolism, tachycardia, increased respiration, nervousness, tendency to fever, low threshold, emaciation, increased appetite, and he further states that in so far as treatment is concerned that no difference should be made between exophthalmic goitre and thyrotoxicosis from adenoma and points out as special points in treatment, that in the more severe cases the thyroid activity should be diminished by preliminary ligation of first, one vessel, then the second, then partial lobectomy, complete lobectomy within a month or two between any of these stages.

He states that the anesthetic should be nitrous oxide and the associated regime should be for the pre-operative, inter-operative and post operative periods.

### DIAGNOSIS OF GALL BLADDER DISEASE.

By W. F. Cheney.

(*Am. Jnl. Med. Sciences*, Oct. 20, 1920)

The author states that the value of the history is so great that no amount of time spent in eliciting it should ever be considered wasted. He says it plays the most important part in solving the problems presented and should be written out in detail and revised and supplemented at each succeeding interview.

He classed the story told by the patient in four distinct groups: Group I consists of the patients with attacks of biliary colic recurring at irregular intervals with good health for months or years between times. The sudden onset, violence, location, radiation and all make a picture that is unmistakable.

Group II presents not only the story of these recurring attacks of colic, but also a complaint of constant stomach trouble between attacks. The suffering from indigestion overshadows the attack of pain until it may be forgotten unless special inquiry is made but the only difference between this and group one is the distressing dyspepsia that fills the interval between biliary colic.

Group III. Here again the chief complaint is of the stomach or indigestion, but there are no attacks of violent pain, though instead there is an annoyance, discomfort or suffering which recurs from time to time in "spells," that the patient recognizes as differing from the constant stomach trouble, though sometimes it is only a fullness along the costal border.

Group IV consists of certain other patients that complain much of the stomach over long periods of time, with no explanation to be found in their history as to cause. Sometimes the history corresponds to that of gastric ulcer, sometimes to the so-called gastritis type, and frequently they are set down to "gastric neurosis." There are no biliary attacks to direct attention to the gall bladder, not even the discomfort described in group three. There is no way to be sure that these cases are due to the gall bladder, until sooner or later, perhaps after years, they develop the biliary colic, or it may be found by exploration after the patient suffers from stomach trouble until they submit to this form of research. That such cases exist, every clinician of experience gradually comes to realize, and we learn to suspect the existence of gall bladder disease in certain types of histories even though no proof is furnished.

Physical examination stands next in value to history, but even so the evidence it gives is often very uncertain.

The results are of three sorts. First, entirely negative, second, purely subjective in that the patient complains of pain upon pressure over the gall bladder, etc.

Third, Definitely objective as well as subjective, that is an enlarged gall bladder or a rigid right rectus can be felt by the examining surgeon as well as the subjective symptoms noted by the patient.

Laboratory examination. He states that there is no laboratory test that is conclusive though he points out several laboratory findings that may be of assistance in determining gall bladder disease.

Fluoroscopy and x-ray plates. He states that much information of great value is supplied by this method. Nevertheless it may in a given case add nothing and it may even appear to implicate the gall bladder when no disease is there. Much depends upon the interpretation. He divides the evidence obtained by this method into three classes: First, the demonstration of changes in the gall bladder itself. Second, demonstration of effects produced on other surrounding parts by gall bladder disease, such as flattening of the duodenal cap, pulling the stomach to the right, etc. Third, by eliminating other pathology possible, which may be causing the history and physical signs of disturbed stomach function such as stomach ulcer, carcinoma, etc.

### HYPERNEPHROMA.

Dr. Arthur Dean Bevan, Chicago.

(*Surgical Clinics of Chicago*, December 20, 1920)

In connection with a case of hypernephroma which presented a negative urine and where a tentative diagnosis was made on the strength of a mass in the renal region with progressive loss of weight and strength, he cites some cases illustrating the difficult diagnostic problems often presented by these cases. He states that in fully fifty per cent there are no urinary findings at all. And singular clinical pictures, he states, are produced by cases with secondary involvement of the great vessels, liver and bones. In one case the first and only symptom was a suddenly developing right sided varicocele. A few weeks later blood appeared in the urine and a mass was felt in the right renal region. Operation revealed an inoperable hypernephroma which by extension had blocked the spermatic veins producing the marked varicocele.

Another case presented the initial symptom of enormous edema of the lower extremities which was due to an inoperable hypernephroma blocking up the ascending vena cava. Still another case was that of a child who, while apparently in fair health, while at play felt something snap in her right hip and fell to the ground. X-ray showed not only the bone destruction at the site of fracture but also an involvement of almost the entire bony skeleton. This was followed later by the appearance of blood in the urine and the finding of a tumor in the kidney region.

He cites the discouraging statistics of the Hochenegg Clinic, where of 34 cases operated only one remained alive without evidence of recurrence at the end of three years. His experience has been much more encouraging since he began to follow up all of his operated cases with the x-ray. He stresses this point very strongly and states that he now has several apparently complete cures.

### ORTHOPAEDICS.

Earl D. McBride, M. D., Oklahoma City.

### PRINCIPLES OF TREATMENT OF CONGENITAL TALIPES EQUINO-VARUS.

By R. C. Elmslie, M. D., F. R. C. S., London, Eng.  
(*Jour. Orthopedic Surgery*, Vol. 2, No 12, Dec., 1920.)

Emphasis should be made upon two points in treatment of congenital talipes. 1. The surgeon should think more of the resulting functional use of the foot than of the



apparent correction of the deformity. 2. When cutting operation must be performed the procedure adopted should be based upon the known pathological anatomy of the deformity.

After thoroughly describing the variations from normal of an inveterate equino-varus club foot of an adult in which amputation was done, he sums up his findings by saying, "in an infant most of the deformity is due to displacement at the ankle joint, subastragaloid joint, and mid-tarsal joint. A smaller portion being due to alteration in the shape of the neck of the astragalus and anterior part of the os calcis. The resistance to correction is formed largely by the astragalo-scapoid capsule, the plantar fascia and the tendo-achilles, the resistance of the tibial tendons being much less important."

Regarding treatment, in his opinion tenotomy has been much too freely employed, since in most cases correction may be obtained in a child under one year by simple manipulation under anesthetic, repeated if necessary on two, three or four occasions, with retention of the foot in plaster-of-paris between manipulations. The great advantage of avoiding tenotomy is that the *ultimate* function of the foot is thereby improved.

He does this in two stages: 1. The forefoot is abducted at the midtarsal joint obtaining full correction of plantar flexion and adduction of forefoot. Plaster is applied but precaution is used against using too much pressure with the cast. To obtain external rotation he applies plaster from inside of the foot, under the sole and outward, up over the flexed knee, so that the final position is that the knee is flexed to a right angle, the foot plantar flexed, abducted and externally rotated.

2. Manipulations of first stage repeated. Then while holding foot abducted forcibly, stretch tendo-achilles by dorsi-flexion. When the foot comes easily 20 degrees over the right angle with the knee extended, correction may be considered complete and plaster applied.

3. After six weeks if correction is good, club foot shoe may be applied and daily manipulations given. Later if the child when walking, lifts the foot in abducted position an appliance will probably not be necessary. If he tends to walk on outer border of foot, a still upright brace must be used.

In case of failure to get the foot past right angles he prefers to wait until the child is a year old and do an open operation, lengthening the tendo-achilles. Tenotomy of the tendo-achilles should never under any circumstances be done before the other parts of the foot are corrected.

In relapsed and resistant club feet he points out that much the same procedures must be carried out first. If these are not sufficient, he makes incision over internal malleolus and cuts away the astragalo-scapoid capsule. He also does osteotomy of os calcis and neck of the astragalus to correct these variations. Tendo-achilles may also be lengthened. He believes relapse is most often due to an initial failure to secure complete correction.

### Editorial Notes—Personal and General

Dr. H. C. Bailey, Sulphur, is doing special work in New York City.

Dr. W. Albert Cook, Tulsa, is visiting his mother in California.

Dr. R. M. Shaw, Alex, is preparing to locate in Oklahoma City.

Dr. Benton Lovelady, Oklahoma City, visited California points in November and December.

Dr. R. L. Kurtz, Nowata, has been reappointed surgeon for the Missouri Pacific Railway at Nowata.

Dr. and Mrs. G. Y. McKinney, Henryetta, are in New Orleans where Dr. McKinney is doing postgraduate work.

Dr. Sam McKeel, Ada, has formed a partnership with Dr. W. E. Boyce, both of whom have recently moved to Ada.

The Ponca City Hospital has been transferred to the Sisters of St. Joseph, Wichita, who took possession January 18th.

858 miles was the distance recently covered, mostly by dog-sled, when an Alaska surgeon was called to see a patient.

Dr. M. B. Prentiss, Mayor of Wynona, retired, is said to be a candidate for superintendent of the Osage Agency, Pawhuska.

St. John's Hospital, Tulsa, a 300-bed institution, will be completed by the end of the year according to architects in charge.

Drs. A. E. Abernathy and D. L. Garrett, Altus, have leased the Altus City Hospital for ten years at a rental of \$5,400.00 annually.

The Henryetta Hospital graduated a class of four nurses January 11th, all of whom successfully passed the State Board examination.

Dr. W. S. Spears, Velma, is locating in Shawnee where he will enter the banking business, taking charge of the State National Bank.

Dr. G. H. Butler, who for some time has been recuperating on his ranch in LeFlore County, has returned to Tulsa and resumed his work.

Dr. C. E. Collins, Hollis, has been appointed health officer for Harmon County, succeeding Dr. W. C. Pennington, who resigned on account of his health.

Dr. T. L. Chambliss, formerly of Hugo, is making an extended visit in California, is now at La Habra and contemplates permanently locating in that state.

Dr. Hugh Scott, Oklahoma City, made a hurried visit to Washington in the interests of possible Federal legislation for hospital needs in Oklahoma in January.

Dr. and Mrs. W. A. Aitken, Enid, are making an extensive visit to Pacific coast points and before ending their trip will visit Honolulu and other points of interest.

Dr. J. C. Matheny, Lindsay, will spend several months in New Orleans doing eye, ear, nose and throat work, after which he will locate in some one of the larger centers of the State.

Sallisaw and its vicinity is said to be undergoing a severe epidemic of smallpox according to announcement of the State Commissioner of Health, who has sent aid from his office.

Dr. J. C. Mahr, U. S. P. H. S., in charge of the Interdepartmental Hygiene Boards venereal control work, has established a clinic at McAlester, placing Dr. C. F. Loy, McAlester, in charge of the work.

Dr. Winnie M. Sanger, Oklahoma City, declared recently before a meeting of the Oklahoma Federation of Music Clubs that music had its valuable sphere as a therapeutic agent. Her subject was "Music as a Healing Medium."

Dr. D. A. Bund, Humphrey, Ark., has located in Saylanna, taking over the practice of Dr. F. J. Baum, who goes to New Orleans for an extended course in genito-urinary work, after which he will locate in McAlester and practice that specialty.

Dr. H. T. Ballantine, Muskogee, who "fell" for the confidential in the garb of an attractive proposition offering a mortgage on an automobile, which shortly developed ownership in others than the mortgagee, is now laughing over his inning, the confidence man having been extradited from Missouri.

Conversion of certain state schools into hospitals did not meet with much favor from any quarter, and after investigation by legislative committees the idea was abandoned as impracticable. Those located at Tonkawa, Claremore, Warner, Tishomingo, Lawton, Miami, Wilburton were under consideration.

**Drs. Thomas J. Lynch, W. C. Mitchener, J. E. Bercau** and **B. W. Hole**, Okmulgee, staff of the Okmulgee Clinic, have purchased a home for their organization, a two-story brick, 60 by 90 feet, the first floor used for offices, consultation and waiting rooms, the second floor for x-ray, minor operative work and laboratories.

**Dr. Walter Howard Miles**, Oklahoma City, and **Miss Rhoda Bradley** of Norman, were married in Oklahoma City January 1st. Mrs. Miles, a graduate of Oklahoma University, holds the proud distinction of having served seventeen months in military service during the war. They will be at home 728 West Fifth Street for the time.

**Dr. F. L. Watson**, McAlester, Secretary, advises the *Journal* that he now knows by first hand information what his erstwhile patients meant when they grumbled about "gas pains." He gained that vantage point by recently undergoing operation for appendicitis. Notwithstanding this crippling process, he shows up 100% as an effective county secretary.

**Talihina Tuberculosis Sanitarium** work should not be cancelled was the report of the House Committee assigned to investigate the proposition embodied in Senate resolution directing that course, which it is said was based upon charges of irregularity in letting contracts for construction. "The sanitarium is an institution of importance to the State and it should be finished without delay" were the concluding words of the report.

**Dr. A. T. Dobson**, health officer of Kiowa County, recently ordered all city schools, public and private, theatres and similar centers closed pending control of an epidemic of smallpox, which it is charged was being ignored by local authorities. Coupling with the order threat to quarantine the town tightly if steps in good faith were not immediately taken for control, had the desired effect upon the city dads, who always see the side near the pocket-book.

**The Osteopathic Proposition**, said to have been urged for passage by the legislature, regulating the height of heels of women's shoes, provokes the editorial sarcasm from the *Tulsa World* that, "It is silly, absurd, altogether indefensible actions like this that arouses the disposition at times to encourage legislating a lot of curative schools out of existence." Regret, almost, that the *World* ever stood for the Constitutional rights of such profession or interest is evinced.

**Dr. J. G. Breco**, Ada, recently received a visit from a burglar, who lifted from his trousers \$70.00 in currency. The visitor overlooked the Colt's revolver the doctor "wears" under his pillow for protection. The doctor snored right through the entire call, oblivious of the episode until next morning. Our only observation is that such an amount of money is rather too large for a doctor to have; we did not think any doctor ever accumulated such a hip pocket roll.

**Washington County Commissioners** unanimously adopted a resolution directing that on completion of their new County Memorial Hospital, any person, resident of the county, having had service in any capacity in army, navy, etc., shall receive free treatment as long as necessary. It was also directed that treatment be accorded any other non resident war veteran in emergency until such time as the proper authorities charged with their care be informed and take over the case. Representatives of the county in the legislature were advised of the action.

**Registration of Physicians Abolished** would be the rule if the bit of sarcastical legislation offered by representative **John F. Martin**, Oklahoma City, became a reality. Expressing himself as being disgusted with the continuous pleas of various schools for separate boards, Martin unbosoms himself as follows: "We have had bills introduced proposing separate boards for osteopaths and chiropractors when it is essential that basic principles of anatomy and physiology be known by all who pretend to treat disease. If we are going to let every form of practitioner set up a new standard of professional fitness, it will be useless to examine physicians at all." Amen.. Ed.

**McCurtain County Medical Society** meeting at Idabel, January 7, elected: President, **A. S. Graydon**, Idabel; vice-pres., **A. W. Clarkson**, Valliant; secretary-treas., **R. H. Sherrill**, Broken Bow (re-elected); **L. H. Hill**, Idabel, delegate. The economic and financial situation of the southern Oklahoma physician was considered at length, decision being that the medical profession more than any other by reason of necessity that he render service first, making remuneration an after consideration, suffered as a result of the chaotic conditions of agricultural regions. A committee to confer with bankers and secure relief until stability was brought about, was appointed.

**The American College of Surgeons, Oklahoma Section**, will hold its first annual meeting at Oklahoma City February 21st and 22nd. **Dr. John Riley**, Secretary, for the Committee announces that the session will include clinics and clinical demonstrations on each morning, papers relating to the science and art of surgery in the afternoons and a public meeting which will be open to the laity and at which distinguished speakers will present in non-technical terms the problems of public health and preventive medicine will be held at the First Methodist Church the evening of February 22nd, 8:00 o'clock. Headquarters, **Huckins Hotel**. He extends through the *Journal* a cordial invitation to attend the meeting to every member of the Oklahoma medical profession.

**Dr. R. W. Dunlap**, Tulsa, Secretary of his society, stimulates his work by issuance of a bulletin carrying a "sting" for those deserving attention, issue of January 19th, initiated with the introductory, "For the benefit of the majority of the members; those who have not attended a meeting this year, I want to announce the officers for 1921." Promising to read a message of peculiar interest to the doctor at the next meeting, he "stings" again with the suggestion, "Of course, if it is of too little consequence to you to attend, you can have the consolation when we get run over again, of 'cussing' the officers who know nothing but hard work while in office." Noring a whining complaint from one probably a chronic complainer, never attending except on election night, that the society was "run by a few," he closes the matter with the question, "Who should run it, the few attending consistently, or the one-nighters?"

**Discrimination** against osteopathic candidates for medical licensure is the basis of the osteopathic demand for a separate board, it is bruited about the legislative halls at Oklahoma City and elsewhere. Such a charge is a reflection upon every medical man in the State, emphatically so against members of the board. The Governor or legislative committee charged with such duties should silence that statement by immediate and thorough investigation and report. Inspection of the examination papers of the candidates in question, alleged to have been so wronged, is a matter of ease and simplicity and will refute or disprove the charge. Regardless of the findings it should be shown at once and emphatically that there is no place in our official medical life for such dishonest practices. Every physician worthy of the name will applaud strict impartiality to all candidates for license, who should be judged solely and only on their evidenced ability and fitness.

"**Not worth a d—**" is the worthy opinion of a member of Oklahoma County Society, referring to Medical Defense, which opinion was forthcoming as a result of the call for payment of annual dues issued by **Dr. Tom Lowry**, Secretary. Hardly a doubt but what this gentleman is not one of that county's victims of malpractice charges; nor is there a doubt but what his able opinion would be reversed should he have occasion to face a jury with his own worthiness in question. It goes without saying that the only ones having any sort of right to express opinion—those heretofore sued—are a unit to the contrary. The gentleman should take occasion to acquaint himself with the universally acknowledged abilities of his attorneys. Unnecessary though, for there is a fleeting minority among us whose great abilities render them immune to such low brow performances as having to be involved in a vulgar



court case. Ochsner just paid the penalty, but some of us are not down at his low plane, therefore have no sympathy with the inferiority which must needs rely upon others for a crutch.

Dr. J. L. Coles, Pawnee Osteopath, charged with administration of drugs when he holds license only as an osteopath, acquitted at Pawnee, it is said on the plea that the act charged was committed in an "emergency," immediately underwent trial before the State Board of Medical Examiners, Oklahoma City, January 13th, on the charge of alleged unprofessional conduct. The Board's verdict was that "Dr. J. L. Coles be reprimanded and placed on probation for one year and that at the expiration of one year, that Dr. J. L. Coles be required to report to this Board in person at which time the charges now against Dr. Coles will be dismissed provided the doctor's professional conduct during this time has met with the approval of the Board," etc. Notwithstanding this very pointed decision, the Pawnee "home" paper published a statement calling the action of the Board an "exoneration," which publication called forth immediate statement from the Board's Secretary, Dr. Byrum, which gave the public the facts as they existed. This case is particularly irritating in that the "Doctor" is a combination of osteopath and holder of diploma from some medical college, graduates of which cannot appear for examination. It should be noted in this case, as to the acquittal on charge of drugs administration, that defense was based on plea of "emergency." That defense may be expected in practically every such charge brought against the Oklahoma osteopath the exception permitting such administration by osteopaths in the statutes of Oklahoma, in theory intended no more freedom or authorization in that respect than is accorded any ordinary citizen or "old granny," nevertheless the small loophole is slowly but surely being taken advantage of by the osteopathic profession, many of whom now own hypodermics, dispense drugs and are clamoring for legal recognition to do those things in the law they ask the legislature to enact giving them a separate board of examiners.

## MISCELLANEOUS

### A SUGGESTION TO OKLAHOMA PHYSICIANS.

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### ADRENALIN IN DIAGNOSIS.

The new science of endocrinology has developed so rapidly that, in order to remain in the vanguard of the march of progress, the physician must needs keep himself informed on every phase of glandular therapy. In harmony with this idea we have directed the attention of our readers, on several occasions, to the series of instructive essays on Adrenalin that have been appearing in the advertising section of this Journal.

In the current issue we present a brief discussion of the use of Adrenalin as a diagnostic agent in hyperthyroidism and pancreatic diabetes, also as a test of suprarenal function. The technique of these tests is simplicity itself, and there would appear to be no reason why any practitioner should not avail himself of them in certain obscure cases in which a differential diagnosis by the usual means may be difficult or even baffling.

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# The fury of the jury—

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"We were unfortunate in not being able to secure a jury of men strong enough not to be materially influenced by sympathy and prejudice."

## Gave no Attention to Court's Instructions

"Of course, contrary to the instructions of the court, but characteristically without effect on the jury, the jury took the physical fact of the failure to cure, as conclusive evidence of negligence and so found for the plaintiff."

## Jury Gives Man \$10,000 for Loss of Right Eye

"——— was granted \$10,000 for the loss of his right eye by a jury sitting before Judge ———, of the Superior Court, yesterday. The suit was brought against Dr. ——— on the grounds that he did not sterilize his instruments or even wash his hands before performing an operation."

## Dentist Must Pay \$9,000 for Death

A verdict for \$9,000 was returned by the Circuit Court against Dr. ———, dentist, who was charged with responsibility for the death of a patient.

It was claimed the Doctor was using an electric drill when a heavy thunder-shower broke, and the drill, affected by the electrical disturbance, transmitted an augmented current of electricity that burned Mrs. ———'s mouth and gave her a shock, from which it was contended lockjaw developed. She died two days later. It was alleged the Doctor failed to have the wire, which transmitted the power to the drill, properly insulated. The Doctor denied this.

## Specialized Service Makes Manifest Its Need

"Some of our profession are excited over a large verdict against a Dentist. The affair was discussed a couple of weeks ago at a meeting of the District Dental Society. The Dentist had protective insurance in another company. Their lawyer knew nothing of Dental terms or Dental Science, and I have always contended that an attorney to win these cases must have much dental and medical knowledge."

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**WESTERN ELECTROTHERAPEUTIC  
ASSOCIATION.**

The third annual meeting of this association will be held at the Little Theatre, Kansas City, Missouri, under the presidency of Dr. B. B. Grover, of Colorado Springs, April 21-22. The annual dinner will be given at the City Club on Thursday evening, and a number of distinguished speakers will be present, including: Surgeon-General Hugh S. Cumming, Dr. A. J. Pacini, Chief of the X-Ray Department U. S. Public Health Service; Dr. H. Bowing, Mayo clinic; Dr. A. F. Tyler, Omaha; Dr. Wm. Benham Snow, New York City; Dr. Frederick H. Morse, Boston; Dr. Curran Pope, Louisville; Dr. T. Howard Plank, Chicago; Dr. Omar T. Cruikshank, Pittsburg; Dr. Byron Sprague Price, President American Electrotherapeutic Association, and others.

A three days session of the Western School of Electro-Therapy will precede the above meeting, beginning April 18th.

Clinics and demonstrations will be held every afternoon. An elaborate commercial exhibit, comprising all the leading manufacturers of apparatus is being arranged, and will prove of great interest to visitors.

For information or programme address the secretary, Dr. Charles Wood Fassett, 115 East 31st St., Kansas City, Mo. 2-21-2

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# THE JOURNAL

OF THE

## OKLAHOMA STATE MEDICAL ASSOCIATION

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NUMBER 3

### REPORT OF CASE OF SINUS THROMBOSIS COMPLICATING MASTOID\*

A. W. ROTH, M. D.  
TULSA, OKLAHOMA

Typical cases of mastoiditis are so frequent in the practice of the aural surgeon that I will not take time to discuss them. We all know the difficulties we have in treating the chronic ones. I do not mean to pass the above conditions lightly for we can all profit by considering them in detail, but that is not the purpose of this paper.

I wish to report the unusual condition I met with in a case last fall.

Some five years ago, S. M., age 9, came under my care during an attack of acute mastoiditis following an acute otitis media of the right ear. Treatment was instituted with slow improvement. Operation was recommended and refused. After some time symptoms abated and finally the case disappeared.

On September 11, 1919, the case returned with the history of a chronic discharge from ear which would disappear for a while and return. The evening he came to my office he had a temperature of 103, pulse 120, marked swelling and tenderness over mastoid region and history of severe pain for past week. He was sent to the hospital and prepared for operation. During the time of preparation his temperature dropped to 99.6 and pulse to 100.

A very extensive operation was done, pus was oozing through the cortex of the mastoid and large quantities of pus in the mastoid cells. A large subdural abscess had broken through and when the opening was enlarged much foul smelling pus poured out. The sinus was then exposed for about an inch and a free discharge of pus followed. The bone over the sinus was necrosed and with the curet a large sequestrum was lifted off.

After cleaning the wound and applying the dressing, the patient was returned to bed and everything went well, except the temperature would go up to 100 and 101 every other day. We had no discharge from the ear, and the wound appeared normal. On the sixth day,

September 16th, when the patient went home, the temperature rose to 103, returning to 98.8 in a few hours.

On the next day, the 17th, about 2:00 p. m. the nurse called me and told me how well the case was doing. At 5:00 p. m. she called and reported severe chill, temperature of 106.6, pulse 104, but later as the temperature went down the pulse went up to 140.

By 2:00 a. m. September 18th his condition had improved, he was taken to the hospital and at 6:00 a. m. we reopened the wound, enlarged the opening over the sinus, opened the sinus and packed it. There was free bleeding from each end of the sinus but no clot found. Patient returned to bed, Murphy drip started, his condition improved, temperature dropping to normal and pulse ranging from 82 to 90.

On the 19th at 9:00 p. m. temperature came up to 106 and pulse 132, but in a few hours returned to normal only to return again in 48 hours. He began complaining of severe headache, and at times was mildly delirious.

At this point I wish to speak of the blood condition. On the 23rd the report was as follows: Total white, 22,000; small lymphocytes, 1%; large lymphocytes, 1%; neutrophils, 96%; eosinophiles, none; myelocytes, 2%; no malaria; blood culture, negative.

On September 24th at 3:00 p. m. with the assistance of Dr. Ralph V. Smith, we ligated the internal jugular. After the ligation the temperature reached 104 and pulse 140, but soon dropped to about normal. The fluctuations now continued daily. Beginning on the 27th the severe headache was followed by a hard chill, the temperature rising to 106, pulse 140, then back to normal, and when the temperature dropped the patient was in fine spirit and wanted to go home. This condition continued and I could not find any relief, the temperature now reaching 106 or 107 and pulse about 140 to 160, sometimes each day.

On the 26th the blood picture was as follows: Total white, 24,500; small lymphocytes, 10—large lymphocytes, 5%; neutrophils, 83%; basophiles, none; eosinophiles, none; myelocytes, 2%.

On October 3rd at 10:00 p. m. the nurse called me, stating that the patient was in bad

\*Read in Section on Eye, Ear, Nose and Throat, Annual Meeting, Oklahoma City, May, 1920

condition and I went to the hospital, his temperature reaching 108 and pulse 200.

This pulse was distinct and three of us counted it. I never thought a pulse of more than 150 or 160 could be counted but this one had a distinct beat.

While in Oklahoma City attending the Southwest Medical Association, I discussed this case with several friends, and Dr. Joseph Beck of Chicago advised that I reopen the sinus. This was done. I exposed the sinus just as far as I could and reopened it. It was very difficult to get into the sinus again but we finally succeeded. Again packing and dressing, and that ended all our troubles. Pulse and temperature never reached 100 again.

We could not find any evidence of any metastatic involvement, the eye ground was normal at all times.

The questions I wish to ask are: Why did we have such unusually high temperature and rapid pulse, and why did the first packing of the sinus fail to stop the trouble?

The case at all times presented the regular symptoms of sinus thrombosis.

For five months the patient was apparently well and then a slight discharge from ear appeared and has not responded to treatment.

### Discussion

*Dr. D. D. McHenry, Oklahoma City:* Mr. Chairman. This certainly must have been a very interesting case. I would rather think the Doctor probably lost a few nights' sleep on that. Evidently he had a mastoid five years before that had left some necrosis in the mastoid, or at the least this must have been going on for months before this acute attack which brought them back to the Doctor, else you couldn't have had the sequestrum of bone. Those things don't happen in acute conditions. It is in these old chronic cases, of course, that we have the deep infections in mastoid work. It is from them we have our brain abscesses more often from the acute condition on top of the old chronic condition that you have your infected sinus thrombosis.

The Doctor asks two or three questions; why he should have had the existing high temperature, and why the first packing of the sinus didn't stop it, while the second one did. Personally I have not had very much experience with infected sinus thrombosis. I had one in which we were not able to get any clot. However, the material that came out of the sinus looked more like a mucous blood than a pure blood. This was a patient that was *in extremis* before he was put on the table, and died on the table, and in which we had informed the parents beforehand that it prob-

ably would but it showed the only chance of doing anything with it. We hadn't seen it until just before it was operated; but surely the high temperature showed a very decided systemic infection. I can't help but think in the Doctor's case that he diagnosed it properly, because it was an infected sinus thrombosis whether he ever found a clot or not, and from the fact that he opened the sinus first and drained it and the blood flowed from each end, and yet the high temperature wasn't relieved, would rather lead me to believe that he had an infected clot, probably in one of the necrocial sinuses which in his first opening wasn't washed out, but in his second was. It might be either in the inferior or superior petrosal, either one, and he may have had a small infected clot there that was infecting the blood stream back through the other way rather than into the lateral sinus, and when he opened this the second time he probably allowed more blood to come through. I haven't asked him; but by this washing out of that little clot back into the sinus, he got rid of that source of infection. I would be unable to explain it in any other way. At least the Doctor didn't speak of being able to find any other focus of infection. That is, in the subdural, under the dura, or any opening, in opening up any larger area around the sinus so as to find another place of infection, I should think that it came from one of the necrocial sinuses.

*Dr. E. S. Ferguson, Oklahoma City:* Doctor Roth was over here just previous to his last operation, and I talked to him about this case. Great congratulations are due to the Doctor in this case that his case wasn't dead. I don't see how he lived as long as he did. Somebody must have been around helping out that doesn't ordinarily help us out in that class of cases.

I believe, as Doctor Roth has said, that this was a case of sinus thrombosis practically from his original operation, or shortly following it, which they do frequently after a mastoid operation. Although you have had no symptoms distinctive of sinus thrombosis previous to that time, the day following, or the second day following, you get evidence of the sinus infection, probably due to the stirring up of an inoculation in close proximity to the sinus. Did you bare the sinus in the first operation?

*Dr. Roth:* Yes, sir.

*Dr. Ferguson:* Anyway, that is the history of a great many cases of sinus infection; they are not detected or not operated at the time of the mastoid operation, but a day or two following. The theory of why you didn't get



the infection in the first operation, as advanced by Doctor McHenry, is probably correct. Anyway, some infectious material along the course of the sinus must have been present and not drained out during his first operation. The high temperature, particularly the 108, was an extreme one. It is a fact, however, in all infections of the sinus, that you have a high temperature following the sudden dropping to normal or subnormal, sometimes accompanied by chills and profuse sweating, which I think he had. It is not uncommon to have the temperature that he quotes at 105 and 106. It is very uncommon to have a temperature of 108, except just prior to death, and probably that case was close to the death point when he got rid of his infectious material. That was an extremely interesting case. The Doctor is certainly to be congratulated on having it recovered.

*Dr. A. C. McFarling, Shawnee:* Mr. Chairman, I happened to have a case at one time that was identical in history with this case up to the point of a tentative diagnosis of lateral sinus thrombosis, and with this other difference, that it was apparently an acute case as far as any history could be elicited, but at the time of the operation there was an exposure of the sinus for perhaps a half inch. I found it so. I didn't expose it purposely, but it was already necrosed at the time of the operation. The patient bore the anesthetic so poorly that we stopped at that place without opening the sinus. The Doctor says: "We must stop, or we will have a corpse here before we get through," and so I quit without opening the sinus. The patient was put to bed, and we had this history of chills and fever that I couldn't detail now, but it sounded like my own case when you were reading it. I felt sure we had a sinus thrombosis, and there were no blood pictures, the people refused any further operative work, because they were standing by and saw how this patient stood the anesthetic, and they just said: "There is no use. If she has got to die, she must die like this," a child about seven or eight years, "she just as well die without an operation as to have another," and so I never got any further than a tentative diagnosis of thrombosis. This picture continued like this for about two weeks, and finally subsided of its own accord. Nothing was done. The patient got well and is alive today with a good ear and all that sort of thing.

The question raised in my mind was this: With this mixed amount of pus lying right down on the membrane of this sinus, would you get an absorption of toxic matter through this membrane without actually getting the germs themselves? I had always believed that

we got a spasm in that sinus, if we didn't open it up we would be certain to have disastrous results. Well, after this patient got well, then I was uncertain, just like you are about this.

But the question raised in my mind centered around those things: could we have an absorption of toxic matter through this membrane and not actually have the septic cell itself? Although I had made a diagnosis of lateral sinus thrombosis, I mention it now not because it happens to throw any light, but it is interesting to me, and I thought perhaps this case was interesting to you from the fact that it subsided without any operative work, and it kept up these chills without the extreme conditions. It got way up dangerously near 200, it got up near the point of taxing the capacity of the man counting it, and yet it subsided without any dangerous features coming on.

*Dr. Roth, closing:* There are two or three points that I want to speak of further: One was that when we did the first operation the sequestrum was there and lifting that off exposed the sinus and the pus flowed freely. Undoubtedly the infection was absorbed through the sinus walls or some lateral circulation had. When we did the ligation, the external jugular was very large and tortuous and out of position. The question has been in my mind whether or not there was some anomaly in the blood vessels around the sinus.

The second opening, Doctor McHenry, bled very freely, and it may have been washed out that way. The boy gained eighteen pounds in a very short time after the last operation. We were sure that we had eliminated a general infection after the ligation, because of the blood count, the blood culture was negative; we had also eliminated endocarditis; therefore we knew it must be local, and under the suggestion that I got when I was over here we did the very extensive operation, just as much as we possibly could, and the result, as I stated in the paper, was immediate.

#### RESTORATION OF MARGIN OF EYELID

A case is cited by John N. Wheeler, New York (*Journal A. M. A.*, October 16, 1920), in which a successful restoration was made by a free graft from the lower part of the eyebrow and the skin directly below it.

The geophone, an instrument by which a telephone conversation can be carried on through half a mile of solid rock, has been perfected, announces the United States Bureau of Mines. This is a splendid invention—but how about an apparatus by which one can get the right number through five inches of solid ivory?

## NASAL HYDRORRHEA\*

FORREST S. KING, M. D.  
MUSKOGEE, OKLAHOMA

My desire today is to call your attention to a disease not commonly met with, and of which little is known or has been written upon in our text books. Of the various text books to which I have had access, but few mention nasal hydrorrhea, and that very briefly. Because of this fact I fear we are overlooking a great many cases which might be more readily diagnosed, were our literature more profuse.

The object of this paper is to bring the subject in open discussion, so that we may profit by the joint experiences of the members of this society. We do not know the cause; but it is a condition characterized by a clear watery discharge from one or both nostrils, as a result of some irritation or disturbance, either peripheral or central, of the vaso-motor supply of the nasal mucous membrane. The amount of the discharge varies from a few ounces to a pint or more in twenty-four hours.

St. Clair Thompson,<sup>1</sup> in 1899, described for the first time the escape of the cerebrospinal fluid from the nose. Such cases had been regarded as nasal hydrorrhea. His analysis of his own and other cases, recorded in literature under various names, made the differential diagnosis between cerebrospinal rhinorrhea and nasal hydrorrhea quite clear. The cerebrospinal fluid is clear and watery in contrast to the slightly opaque and viscid fluid or nasal hydrorrhea. The dripping is constant and free from taste, sediment, odor and mucin. It reduces Fehling's solution, while that of nasal hydrorrhea when tested with alcohol, throws down a stringy precipitate, like mucin. When the precipitate is boiled with sulphuric acid, a sugar-like material is formed. The proteids are coagulated by heat, and it does not reduce Fehling's solution.

The characteristic picture of nasal hydrorrhea is at first that of hay fever, with extreme irritation in the nose followed by sneezing and a profuse watery discharge from one or both nostrils. With some patients the discharge lasts all day, while in others it is periodical. They may have an attack in the morning, and be free from it the rest of the day. In cases which I have studied I have observed that an attack is easily brought on by excitement, anxiety, or fatigue. It is also aggravated by dust, cold winds, and dampness. It generally becomes quiescent during the sleeping hours, again becoming active on entering the duties

of the day. The patients become nervous and depressed, and one made the following remark: "I would sooner be dead than to think I would have to continue the way I am much longer."

## Pathology

The pathology is obscure, it however is some nervous condition; the principal affection being in the mucous membrane of the nose. The mucous membrane and connective tissue become filled with serum. The turbinates become edematous and dropsical in appearance, and fill the entire nasal cavity.

It differs from hay fever in that it occurs principally in adult life, is not affected by pollen, and occurs with as much regularity in winter as in summer. I have in recent years diagnosed a few of these cases; however, I believe I can look back and see cases I have overlooked because I did not know enough about the disease in the milder form to make a diagnosis.

I desire to submit a few of these case records:

**Case 1.** Mrs. F. She came to my office May 27, 1917, and gave the following history: At the age of eighteen she fell and broke her nose. From that time until she was thirty-nine, she had darting pains and stinging sensations in the right nostril. At that age she commenced to sneeze in the morning and at intervals through the day, with a constant oozing and a heavy pressure in the nasal passages. It very seldom bothered her during the night unless she was suddenly awakened or had occasion to get up. She treated with different men with no results, but gradually grew worse over a period of five years. At that time she came to my office.

On examination I found edematous turbinates, and a very decided deflection of the septum, high to the right, and a low ridge to the left. I treated her for about two months with no results. Finally on July 18, 1917, I performed a submucous resection, which operation relieved some of the pressure, and reduced the sneezing one-half. I kept her under observation until the following year. She kept complaining of a returning of the fullness. The middle turbinates being much enlarged. I removed the anterior one-third from both sides; which so far has relieved nearly all of the pressure symptoms, and improved the sneezing and oozing; but she still has her morning sneezing spells, however, much less severe than formerly. Over a period of eight years she has had relief from sneezing one week in June, 1919, and two weeks in January, 1920.

**Case 2.** Mrs. W., age 40. She had been suffering six months when I first saw her. She gave the typical history of sneezing and oozing

<sup>1</sup>Ballinger, Gleason.

\*Read in Section on Eye, Ear, Nose and Throat, Annual Meeting, Oklahoma City, May, 1920.

regardless of seasons, and was a clinical picture of nasal hydrorrhea. On examination I found polypi developed from the edematous turbinates. The removal gave her very little, if any, relief. I watched her over a period of six months, and under a tonic and hygienic treatment she improved for a time. Local treatments had little effect except to give her temporary relief. I finally lost trace of her, she floated on to some one else.

**Case 3.** Male, age 33. This patient came to me in January, 1919, suffering with symptoms simulating hay fever. There was no evidence of inflammation in the nose, the turbinates were slightly puckered, and looked like a water soaked hand. The sneezing and profuse discharge, and time of year, assisted me in diagnosing the case. Under a good general tonic, and sprays of adrenalin 1-5000, and plenty of exercise, this patient is practically over the attack.

As to the treatment: I find nothing which will give permanent relief in the severe cases. Temporary relief may be had in the severe cases, and probably a cure in the milder ones. Adrenalin 1-5000 used as a spray, an oil spray consisting of camphor, menthol and eucalyptus, helps some. Cocain solution 2-4% gives the most temporary relief, but should be used with caution. Atropin sulphate 1-200 grain per mouth has been recommended every three to four hours; also calcium lactate 30-40 grains daily; but I have failed to obtain results in their use. Proper exercise, plenty of fresh air, elimination and tonics aid in the treatment.

I do not recommend surgery in all these cases; however, in cases where you have malformations, I think it advisable.  
307-8 Surety Building

### Discussion

*Dr. L. A. Newton, Oklahoma City:* Mr. Chairman, this is an interesting paper. I have not seen very many cases. I had a case this winter of sneezing. I didn't make a diagnosis of hydrorrhea. My opinion is that ordinary cases of nasal hydrorrhea are suffering from some form of influenza similar to hay fever, except that it is something in their diet, or something they eat that produces an antiphylaxis. That is my opinion; I don't know. It might be one thing with one person and something else with another. It is my candid opinion that that is really the source that we would have to look to in order to find a relief in those cases.

*Dr. W. T. Salmon, Oklahoma City:* I didn't know that anyone could make such an interesting paper out of hydrorrhea. I think, though, that the Doctor is including one case which he

qualified as hydrorrhea. In a true case of hydrorrhea you couldn't see anything, except the patient will tell you that there is a constant running of water, and in my experience the application of adrenalin makes them sneeze more, and they will go away and come back and tell you how much they sneezed after they left you. I have one case now—I did have—somebody else may have it by this time. My remedy was atropin. I have had a few cases of this kind, and fortunately, a few years ago I saw an excellent paper upon this and was able to diagnose a case soon afterwards, and I have seen a few cases since. However, with this last case that I had I failed to perfect a cure.

*Chairman L. M. Westfall:* I give it to you for what it is worth, in some of these cases that I have seen they might not absolutely pass muster on the Doctor's diagnosis, but they are of that type of thin, serous, free secretion, and I have used a half of one per cent optochin. It has a technical name which is very long and I never remember it; but this was suggested to me by Doctor E. F. Davis for the treatment of acute pharyngitis and it worked very nicely. It occurred to me that it might help these cases, and in some of them it did certainly help wonderfully.

*A Delegate:* A spray?

*Chairman L. M. Westfall:* In a spray, yes, sir.

*A Delegate:* What per cent, Doctor?

*Chairman L. M. Westfall:* Half of one per cent optochin.

*Dr. E. F. Davis, Oklahoma City:* I have not used it in hydrorrhea. I don't know that I have run across any such cases in some time, but I have used it a good deal in these pharyngitis cases which we had this winter, which possibly were of a pneumococcic character. The cases were the most intense sort, without any objective symptoms, not even hyperemia, and they certainly responded immediately—would get well in twenty-four to forty-eight hours. I have used that a good deal in the nose and more as an astringent, and it worked there all right, but as I say, I haven't seen a typical case or a real case of hydrorrhea.

*A Delegate:* Do you spray the throat with it, Doctor?

*Dr. Davis:* Yes.

*Dr. King, closing:* I know this patient, in one particular case that stayed with me, she has been with me five years now, and I think she will be with me when the Medical Society meets at Muskogee, and I will have her over there. I sent her up to Dr. Thompson one



day, and he immediately sent her back. He didn't say much. I agree with the Doctor about adrenalin. It does make them sneeze more. It acts with nasal hydrorrhea just like it does in hay fever, and if you ever get a real bad case of nasal hydrorrhea you will try to shove it off on somebody else.

## THE INVOLVEMENT OF THE MAXILLARY SINUS IN ACUTE RHINITIS\*

L. A. NEWTON, M. D.

OKLAHOMA CITY, OKLAHOMA

Infected maxillary sinuses are very common in our everyday practice and they are more often involved than most physicians suspect unless they give it a little closer attention.

I was prompted to write this paper more to relate some of my experiences and methods of treatment in these cases than anything else, and shall not deal with the radical treatment of chronic maxillary sinusitis, as that is a subject in itself, but with the ordinary cases of acute or subacute cases we meet with in our everyday practice.

The maxillary sinus is undoubtedly more frequently involved than any of the other accessory nasal sinuses.

There is often quite a lot of difficulty in making a diagnosis of the trouble, many times the pain is not severe, if any, swelling is not present in any appreciable degree, and tenderness on pressure is lacking in many cases.

The x-ray may mislead us unless there is necrotic bone or an old chronic sinus filled with granulations and thick pus, the diagnostic lamp or transilluminator in my hands has been of no practical value, not only in the maxillary sinus, but the frontal as well, for it will often show a clear sinus when there is really infection if the pus happens to be thin, and in the early stage of the trouble.

We are not always justified in putting a trocar into it to see if there is pus or not, or on the other hand extract possibly an innocent tooth that we may suspect of being the source of infection and in this way open up an avenue of infection to what might be an innocent sinus. One point that often helps us in differentiating the sinus involved is the pus coming into the middle meatus over the anterior end of the middle turbinate when there is an absence of pain and tenderness over the frontal sinus, this being a much smaller sinus and situated in harder bone where the pus cannot give vent to itself as in the maxillary, and is always very much more painful, also the quan-

tity of pus is diagnostic, there generally being very little from the frontal and profuse from the maxillary.

When swelling does occur from involvement of the maxillary sinus, it is usually very diagnostic and can be confused with only one thing and that an infection in the loose tissue of the face coming from an infected tooth.

If pain is present it is usually described as dull and boring in character and rather of an obscure nature and location.

My experience has been that in nearly all cases of subacute rhinitis following closely upon a so-called cold in the head or acute rhinitis, one or the other maxillary sinuses have become more or less involved, I mean those cases where the sneezing and difficult breathing has subsided and a thick, tough, copious yellow discharge is complained of and the patient says "this cold has been hanging on for some time and I can't get rid of it and catch more cold on the least exposure." A closer questioning will generally give a history of a lot of troublesome cough, and especially is it bothersome at night in nearly all these cases, and there is a very close relation between the sinusitis and the cough, for when attention is given to the sinus and not the cough, and the sinus trouble is cleared up, the cough immediately clears up as well.

There is no doubt that many of these coughs that are persistent following these colds would clear up quickly were more attention given the sinuses and not so many expectorants and sedatives given for them. If men in general work who encounter these persistent coughs would give more careful examination of the nose, they would many times be able to relieve them easier and quicker, and in many cases with a hacking, tickling cough, where beginning tuberculosis is suspected but cannot be confirmed, it would often help in locating or clearing the trouble were the sinuses thoroughly examined and eliminated.

There is no question that many cases of pharyngitis and obscure sore throats are caused by diseased nasal sinuses, simply by the constant discharge of pus into the nasopharynx keeping its mucous membrane in an irritated condition; many tonsils that have been removed to try to relieve sore throats and pharyngitis, which gave the patient no relief, no doubt could have been relieved had attention been given the sinuses instead, and for this reason when there is any doubt about the tonsils being the offender, we should make a more careful examination of the nose, and again, there are many cases where had tonsils work the other way and cause trouble in the nose through extension of infection along the mucous membrane of the nasopharynx into the nose or by focal infection.

\*Read in Section on Eye, Ear, Nose and Throat, Annual Meeting, Oklahoma City, May, 1920.

Some six years ago I had a patient who contracted a very severe acute rhinitis and came to me for treatment. The acute condition soon subsided into a subacute one, and the discharge became thick and profuse; the patient developed a very annoying cough and it, as well as the discharge, persisted over a long period of time. In spite of all my efforts at that time, the patient became very much alarmed for fear of beginning tuberculosis, but within the last year this same man came to me again with the same condition as before; this time attention was given the sinuses by treating them with suction, and the condition cleared up in five or six days instead of hanging on for a month or more as is had in the previous attack.

A sinus that has been more or less involved during an acute rhinitis will, and many times does, get into a subacute stage and stay in a quiescent state for an indefinite time only to flare up at the least exposure and really be the instigator of another attack of apparently acute rhinitis; many of our patients who catch cold so easily have sinus trouble in a latent form, and this may be one of the greatest factors entering into the case when we are searching for a cause why certain people catch cold so readily on the least exposure. Most of the patients with maxillary sinus trouble complain of a tired, worn-out feeling, in other words "all in," with lack of energy due to the focal infection from the sinus; this has been a very noticeable characteristic symptom with all my cases, and much more so if the infection is anyways severe. The patient may have rigors and fever with practically no pain or swelling and not a very great amount of nasal discharge; under these conditions we are very easily misled and overlook the sinus. Some two years ago I had under my care a case that had been treated two or three weeks for malaria, by a very good man, owing to the fact he had been having chills until finally some swelling occurred and the antimalarial treatment had had no effect, the swelling directing attention to the sinus which was treated by suction, and almost immediate relief was given to the patient from chills and temperature.

During the past winter there has been an unusual amount of sinus involvement and nearly all these cases where the maxillary was involved there was a very annoying cough which cleared up as soon as the sinus was relieved. Just what the connection between the cough and sinus is, is questionable, possibly reflex and possibly due to the discharge into the nasopharynx, producing an irritation of the mucous membrane, but some cases with very little discharge and no pharyngitis have the cough. I have been careful to watch this one symptom and it is almost invariably

present; and as I said before, when the sinus clears up the cough does also without expectorants or sedatives.

There is one other thing which should be given more careful attention or consideration, and that is the middle turbinate in sinus disease. These cases are always congested and enlarged, blocking drainage, and it has been the rule in a great many cases to remove a piece of the middle turbinate, if not all of it, in order to establish drainage. This should be done only in the rarest instances, for if proper attention is given the sinus and stop its discharge pouring over the turbinate, it will go down of its own accord, for the sinus is the offender and not the middle turbinate. Recently, in cases where I formerly removed a piece of the middle turbinate, I have been gratified to see these swellings subside and remain so permanently after suction and local treatment, which is far more satisfactory to the patient; even turbinates with apparently large granular cells in them that looked like it would almost have to be removed to establish drainage will many times look entirely different under this treatment in a short time.

My plan of treatment is principally suction, after the tissues have been shrunk down with cocain solution to give better drainage to the natural opening. Suction is applied until no more secretions can be pulled out, and then a twenty per cent solution of argyrol is applied to the entire nasal cavity.

There is considerable to be learned in how to apply suction successfully; pus many times has to be coaxed out, it will not come out readily with a straight pull, but by allowing the slightest amount of air to escape into the opposite nostril or around the suction tip, it will generally come away freely after we have almost given up hope of getting any more out of the sinus.

We should keep up the treatment until we feel the cavity has been thoroughly emptied, for a half way treatment will avail very little, if anything at all. This treatment is not only beneficial by clearing the sinus of pus, but it gives a hyperemia that is decidedly beneficial. It is well to start carefully with the first treatment, not using much force, for the patient becomes alarmed easily and will lose confidence in you and the treatment if what he thinks is hurt very much, but it is rare they are not ready for a second treatment if you are careful as they experience so much relief from their distress.

### Discussion

*Dr. R. O. Early, Ardmore:* I think Dr. Newton's paper is timely. We have all seen more cases the past year than ever before of

maxillary involvement. This paper is hard for me to discuss because he has confined himself in his paper to maxillary sinuses alone. He speaks of the extraction of innocent teeth. I don't believe that is done any more since the use of the x-ray; and another thing, I do not believe the teeth are causing this trouble nearly so much as we formerly thought they did.

He is laying great stress upon a cough following sinus trouble. I cannot agree with that. I could if he was taking up all the sinuses. I can see possibly how posterior ethmoidal and sphenoidal involvement might cause a posterior pharyngitis, but not from the maxillary sinus because that is the one sinus in which drainage is better; lower down secretions can be blown out on the handkerchief.

Take the frontal; of course there is no drainage during the recumbent position, and the only time we get drainage from direct pressure is when they are in the upright position, and again, I would think they would be able to expel all this secretion.

I think that there is rarely any case of acute rhinitis but what we have an acute involvement of the maxilla in direct connection. I have seen so many cases where the hole cleared up and still have an involvement of the maxilla which persisted, as he says, for some time, and I take it that the secretion is not the cause of it, but a pathological change in the mucosa of the sinus, and those cases are more apt to recur too.

I think the Doctor's paper is well taken right now. I haven't any more remarks to make in discussing it. I don't believe that from a maxillary sinus we get the cough that he speaks of. I don't believe it can be attributed to that.

*Dr. D. D. McHenry, Oklahoma City:* This is a very interesting paper, and it is certainly a very timely one at present, as we are having so much sinusitis this spring. At least, I have been talking with the other men, and that has been their experience as well as mine, that we have had more sinusitis this spring than for a great many years in the same length of time.

A few things in the Doctor's paper I probably cannot altogether agree with. I get a great deal of help from transillumination. I see even a great many acute cases where I am sure I get a dark shadow long before there is any granulations or any of the other changes we expect in chronic cases.

Another thing the Doctor speaks of is a cough. I didn't hear Doctor Early's discussion of this. I haven't found the cough with the maxillary cases. Most of the cough, in my opinion, from sinusitis comes from the irritation of your nasal pharynx and your post-

pharyngeal wall, and I could readily see how you will get this from your nostril trouble if you have pus enough that runs backward to this region. Most of it, however, is blown out through the nose. In your posterior group of sinuses, inflammation in these will cause your cough more often, has been my experience.

The Doctor, of course, didn't go into the treatment of the maxillary sinus, outside of the suction, which has been very, very valuable in my hands. I have succeeded in curing practically all of the acute cases that way. Probably they would get well without it. I don't know. If the drainage is not good, I always remove a piece of the inner turbinate.

Just a word or two, probably reiterating a little bit off of this paper; I attended the Texas State Medical Meeting, as well as the A. M. A. meeting, and there I heard Doctor Ross Skillern of Philadelphia read a paper on ethmoids, and discuss the same subject again at New Orleans—a man, I expect, who has had probably as much or more experience with sinuses than any man in our country. He cut the thing short, which I must do at this time. He is not near so radical in his treatment as he has been. He has become more conservative. In his ethmoid cases he removes his turbinate and leaves the cells alone if possible. He has seen so many cases of ethmoids in which the cells were opened up where instead of curing the condition, seemingly all the rest of the cells were infected, and where at first he only had two or three infected. This was forcibly impressed on me as that has been my experience in quite a few of these ethmoid cases. That is, however, not the discussion that belongs here. That probably should not be here, but was a point which struck me so forcibly that I give it to you that way.

*Dr. W. T. Salmon, Oklahoma City:* I enjoyed this paper from the standpoint of it being something that I haven't had much experience with, treating those conditions such as he has had. But here is a good place for us to compare and swap opinions upon transillumination, x-ray pictures, etc. You know there are specialists in everything. Now, this man may be a specialist in his section, and Dr. McHenry may be a specialist in transillumination. It has been my experience, and not only from that, but from other people's opinions that I could believe, that in transillumination it was not the pus mine that showed anything at all, but it was the inflammation of the lining of the antrum. But I have never been able in transillumination to get the slightest information that was dependable. It was always some other symptom upon which I founded my diagnosis. Some



of the greatest mistakes I have ever seen committed have been from the effects of the x-ray. Now, a man is hardly justifiable if he has got a sinus trouble, a maxillary sinus, inflammation, in not having an x-ray picture made or transilluminated, but I don't think it is much confession for me to make that those things have never given me much information, and if there is somebody else here that depends upon such things, I would like to know it. I want to know if my mode of doing those things has been wrong, and if I can improve it, if I can get different instruments or something that will help me in that line.

*Dr. W. E. Dixon, Oklahoma City:* Mr. Chairman, I enjoyed the Doctor's paper very much, and it is a subject I have been interested in for some time. The Doctor spoke about swelling and tenderness on pressure. In making a diagnosis in the antrum I find that in my experience we have but very little discomfort about the antrum. No swelling, the patient has no pain usually. Once in a while I have a case where I do get pain about the antrum, but very seldom. The two things that bring the antrum to my mind is, first, pain in acute cases. And that pain is definite and certain. Sluder describes the spheno-palatine ganglion, and that is what we get in an acute antrum. The pain, if you ask your patients, always starts there about the eye and back to the ear (indicating). They will come to you with an earache. In those cases then we transilluminate. Sometimes we are mistaken. But we transilluminate those patients, and I want to agree with Doctor McHenry that there is something in transillumination, and the more we study transillumination the more we will get out of it. For instance, we find in some cases we have a thick bone, or maybe an old antrum disease that has got well and has a thickened mucus membrane, and will get a dark shadow, and yet we get the light through. We may get the eye reflex. We never think of the antrum being involved unless we don't get an eye reflex. We may get transillumination through, well through the superior maxillary lower part, a large part of it, and yet if we don't get a light reflex we immediately put a needle in that antrum and wash it out and get the pus or not, as it is.

There is another class of cases that breaks without any pain, cases that have gone on and had the subacute stage, as the Doctor says, where the ostium is opened up and we have a large amount of drainage in your nasopharynx running down, and people come in maybe without any other symptom of anything of that kind; but we want to find where that pus is coming from. Those cases we trans-

illuminate, and oftentimes find pus from the antrum.

Now, I don't use the suction. Maybe I don't know how. I have tried it out several times, and I want to see Doctor McHenry and Doctor Newton use that, because I don't get the success with it. We always wash them out, and in all these acute cases, in ninety-nine per cent of them, in six or eight days they are well. The chronic cases, of course, have to come to an operation. But the point I want to make is, you don't have any symptoms about your antrum. The pain is always over your forehead, and we often tell people we think it is a frontal sinus affair, but it isn't.

*Dr. R. W. Dunlap, Tulsa:* Mr. Chairman, I wish to bring an echo from the New Orleans meeting. A gentleman whose name has escaped me now demonstrated a new way of transillumination, and instead of putting the light in the mouth and getting the illumination through the maxillary antrum through the cheek on account of the very thickened condition, he has evolved this way. It is as simple as can be, and he uses an extension light with electric ophthalmoscope or any small light, and by simply putting it inside the orbit and letting the light go through the floor of the orbit, you can see through the roof of the mouth much better than you could ever see through the cheek. It is very simple and very easily done, and the light is transmitted much more easily, and the shadows, of course, they are of the same value, whether the antrum is involved or not.

The man who gets both his living and his happiness out of his business is indeed fortunate.

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## TONSILLECTOMY AND ACUTE RHEUMATIC FEVER AND CHOREA

Eighty-five children, each of whom had presented one or several of the rheumatic manifestations before the tonsils were completely removed, were observed by William St. Lawrence, New York (*Journal A. M. A.*, Oct. 16, 1920), during an average period of three and one-half years after the operation was performed. The tonsils were markedly hypertrophied in 13 per cent. of the cases, moderately so in 69 per cent. of the cases, and not enlarged in 18 per cent. of the cases. They were the site of recurrent inflammation before the tonsils were removed in 73 per cent. of the cases. "Sore throat" recurred after removal of the tonsils in 7 per cent. of these. At least two operations were necessary before the tonsils were completely removed in 22 per cent. of the cases. The tonsillar lymph nodes were enlarged in 100 per cent. of the cases before the operation was performed, while in 59 per cent. of the cases they were impalpable afterward. One or more attacks of acute rheumatic fever had occurred in forty-two cases before the tonsils were removed. After tonsillectomy there was no recurrence after the operation in twenty cases, or 50 per cent. Sixty-one cases showed myositis and bone or joint pains before the operation was performed, and there was no recurrence in forty-seven cases, or 77 per cent. Fifty-eight cases of organic disease of the heart were present in the series. Twelve of the patients had suffered at least one attack of cardiac failure before the tonsils were removed. One patient suffered one attack afterward. The exercise tolerance in the cases of cardiac disease seemed to be favorably influenced by tonsillectomy in the instances in which indications existed for the removal of the tonsils. Nutrition and general health were improved, and intercurrent disease was less common after the tonsils were removed.

## EPITHELIOMA OF LOWER LIP

As noted by others, the reports analyzed by Everett S. Lain, Oklahoma City (*Journal A. M. A.*, Oct. 16, 1920), obtained from a study of 122 cases also show epithelioma of the lower lip to be far more common in outdoor workers, and most frequently seen on the side of the mouth where a cigar or pipe is held. Early diagnosis and treatment of the lymph drainage of the lips will materially raise the percentage of cures. Neither surgery, radiotherapy nor any other one successful method of treatment should be used in all cases alike. Radium and the roentgen ray, singly or combined, give the most satisfactory results in a selected class of epithelioma of the lower lip. Lain places these cases in three groups: 1. Epitheliomas which may begin as a seborrheic-like crust, a small recurrent vesicle or fissure, at first superficial, later becoming infiltrated and indurated, etc., and situated entirely or almost entirely on the cutaneous surface of the lower lip. These lesions are generally of slow growth and late to metastasize. 2. Those which are so located that one third or more of the lesion overlaps the mucocutaneous border of the lip, though no glandular enlargement is easily palpated. 3. All cases in which more than half of the malignant growth is situated on the mucous surface of the lip of many weeks' or months' duration, and cases which owing to neglect or incomplete treatment, have had a marked recurrence. Treatment with the roentgen ray or radium, singly or combined, was given to 107 patients. Of seventy-two patients treated and belonging in Class 1, 95.8 per cent. are living today or have lived for more than three years. Of twenty-seven patients belonging in Class 2, 70.3 per cent. lived from one to nine years. In Class 3, nineteen patients were examined, of whom four were treated. Three of these died within one year.

## ETIOLOGICAL IMPORTANCE OF FOCAL INFECTION IN OPHTHALMIC PRACTICE\*

ALONZO C. McFARLING, M. D.  
SHAWNEE, OKLAHOMA

So much has been said and written upon the subject of focal infections that one feels constrained to offer an apology for the presentation of a paper upon that subject at this time. But I hope to confine any criticism strictly to the subject, as I shall not attempt to discuss the subject in its entirety even in a general way. I shall not attempt to discuss this subject in a comprehensive way for two reasons, the first of which is that the subject is too broad to be properly discussed in the time allotted for any one paper; and, second, to do so would be to rehearse certain phases of the subject already worn old with constant reiteration.

The spread of infection from a chronic focus occurs in three ways:

By direct extension to adjacent tissues.

By transportation along mucous or serous surfaces.

By metastasis through the medium of the blood stream and through the lymph channels with the final involvement of distant organs.

The last mentioned type is by far the most important to the ophthalmologist, since the anatomical relationship of the eye is so remote from any of the usual foci of infection as to preclude the probability of a spread of infection from such foci by any other means save metastasis (through the blood and lymph streams). Since the blood and lymph streams offer an open highway between distant anatomical points and practically make them contiguous, it behooves us to consider any chronic focus of infection, however remote it may be, as a possible factor in pathological conditions of the eye, the etiological history of which has been more or less shrouded in obscurity.

Dwyer of New York, in a paper which he read before the section of ophthalmology at the sixty-ninth session of the A. M. A. at Chicago in June, 1918, reported a series of cases of corneal ulcer. These were cases of long standing which had defied the best efforts of his colleagues and were, therefore, of more than passing interest. Laboratory examinations of these patients revealed that the intestinal contents were either highly acid or highly alkaline in reaction, and contained large amounts of indol, skatol, and, in some instances, phenol. There was also a high percentage of indican in the urine. The colon bacilli were found very much reduced in number and were almost entirely absent in some cases. Intes-

\*Read in Section on Eye, Ear, Nose and Throat, Annual Meeting, Oklahoma City, May, 1920.

tinal irrigations with sodium carbonate were practiced in the acid cases, and with lactose in the alkaline cases, in an effort to approach the normal reaction as nearly as possible. The colon bacillus was transplanted and, in the alkaline cases, Bulgarian bacillus was given by the mouth. This, with proper attention to diet in order to reduce the amount of indol and so forth and to facilitate growth of the colon bacillus, constituted the treatment, which was followed by prompt relief of all symptoms.

In summing up he says, "*By far the largest number of cases, choroiditis, retinitis, iridocyclitis, glaucoma, and the like, I have diagnosed as to the condition present, but cannot go further in the etiology or treatment. The cases run their course in spite of the treatment adopted.*"

I do not wish to criticize what Dwyer says on the subject, but I do believe that, in many cases, focal infections, not only of the teeth, tonsils, etc., but also absorption of intestinal toxins as well, have paved the way for the pathology destined to follow some trivial exciting cause. In some cases, no doubt, it has constituted the exciting cause.

In this connection I shall outline briefly the history of such a case:

O. B., white, male, age 39, occupation, clerk; had chicken-pox at five years of age; pneumonia at 8, and diphtheria at 12; consulted me on October 10th, suffering from a violent iritis. General appearance good, except the sallowness of complexion and flabby appearance of the tissues usually seen in persons spending most of their time indoors.

Physical examination revealed a pyorrhea for which somewhat more than half the total number of teeth had been removed.

The usual methods of treatment were employed for about one week with little or no relief of the symptoms, the pain was perhaps a little worse than at first. At this point he consented to the removal of all the remaining teeth, which was almost immediately followed by marked relief of the pain. Although vigorous treatment was pursued for a period of two or three weeks longer, no further improvement was noticeable. Thereupon a calomel purge was given at night and followed by saline by the mouth the following morning. After free purgation the patient was given Bulgarian bacilli by the mouth and the diet restricted as to proteids. The alleviation of all symptoms was almost immediate, and so marked as to leave no doubt as to the therapeutic expediency of the measures employed, nor which of the two foci mentioned was the more potent etiological factor in the case.

It would seem that the conclusions to be drawn from this case are simple, obvious and

direct, and I shall leave it, without further comment.

I shall cite one more case in which the relation of cause and effect may not appear to be so direct, and leave the subject with you for discussion.

J. F., male, aged 12 years, well developed, well nourished, family history negative, had measles and whooping cough, was sent home from school complaining of headaches which were always brought on by use of the eyes in reading. Cessation of all use of the eyes for near work usually relieved the symptoms in a short while. Examination after four days use of atropin revealed a hyperopia, of one degree, which was corrected with apparently prompt relief of the symptoms. After 4 weeks use of the glasses when school duties were resumed the headache returned as severely as before, and after some weeks effort at school, patient was again presented for examination. The eyes were carefully gone over with the same results as at the first examination. Upon examining the throat, the tonsils were found almost completely submerged and infected, a large adenoid was also found to be infected. Ablation of both the adenoid and tonsils was followed by immediate relief of all the symptoms of eye strain and patient was able to go on with school work in perfect comfort.

It is a well known fact that the constant absorption into the blood of toxins and toxic products of pyogenic organisms will produce headache, etc., as also do certain refractive errors, together with the various heterophoria incident thereto, produce headache of a like degree of intensity.

There are also well developed cases of headache, which are attendant upon and always follow the use of the eyes for near work, whose history and symptomatology would inevitably lead one to the conclusion of eyestrain, but which are not relieved by the use of cycloplegics and correcting lenses. Closer investigation in such cases will frequently disclose the co-existence of a focus of infection too remote and of itself insufficient to have produced the headache.

The pendulum of professional interest has swung widely in the direction of this subject and has begun to recede in another direction, and this paper has been made brief in the apprehension of dealing with a waning interest. But, if after the first blush of enthusiasm in a new idea, there remains a substantial residuum of importance, (and in this matter I am convinced that there remain questions of the greatest and most far reaching importance, both direct and collateral), we should not too soon leave it to entire neglect to pursue other new ideas. I am convinced that the subject



of focal infections, in the realm of its more indirect and obscure phases, has scarcely been touched, and the subject should receive the constant attention of practicing physicians in order that new facts, and all facts available, may be reported and collated, from which perhaps deductions of unforeseen importance may later be drawn. We need more facts and reports of cases. If medicine is to claim a place among the deductive sciences, its new theories must have their encyclopedic stage in which sufficient data can be collected and made available, to warrant a scientific conclusion. We need more observations reported on this subject, no matter how insignificant or trivial they may appear. The life history of the liver coccidium of the rabbit for many years remained about as useless a piece of scientific knowledge as could well be imagined, and yet the knowledge of it, absurd and improbable as it might seem, was the direct and efficient factor in the discovery of the life history of the malarial plasmodium.

And the idea I have sought to suggest and to illustrate by the last, if not by both of the cases cited, and which I have ventured to think might be new, is the idea of a focal infection in the role of criminal accessory before the fact, not directly present and directly concerned, but aiding, assisting, and abetting in, and conniving at, the creation of disturbances and conditions with which the infection apparently has no proximate relation.

To use a homely example, *the* question in all medical diagnosis is whether the dog is poor and thin and skinny because he has the mange, or, has he the mange because he is poor and thin and skinny, and a determination of the individual factor *x* may solve the dilemma, but it is the determination of that factor that taxes the closest and most discriminating scrutiny of the diagnostician. The question of whether a focus of infection is the deploying point of pyogenic infection, or merely a rallying point, I take it, is yet unsolved, and might still offer a subject for heated polemics. But in the last case cited, I think a careful attention to the history given will support my idea of the role played by the infection. But if it is to be urged that the error of refraction simply fulminated an otherwise unnoticeable and latent infection, and that the symptoms described were the direct effect of the infection, that opens the field for discussion, and if I have suggested a new idea, if I have been brief, and if I have opened up a field for profitable discussion upon any of the points touched upon, the purpose of this paper has been accomplished.

#### Discussion.

*Dr. E. S. Ferguson, Oklahoma City:* In all

branches of medicine the belief has been on the crest that most every disease known to man has been caused from focal infection. That pendulum is swinging back and forth, and probably will reach the real scientific facts some time in the near future. We have had faddists who wished to remove tonsils, teeth, open up sinuses and remove the appendix, and every other point that is subject to infection rather indiscriminately.

Just along that line I wish to rather encourage the nose and throat man to become more conservative in the excavation of tonsils, especially as a routine practice. It is very easy to say that every tonsil is infected and take them out. I heard that statement made, that practically every tonsil should come out. But if you will follow up these cases where you have removed your tonsils, and unfortunately we are not doing that as much as we should, you will find that a great many of them have not been improved one particle by the operation. I have been guilty of the practice just as well as the rest of them, but I think it is time now for us to try to get some scientific reason for the removal of the tonsils more than we have done in the past.

Doctor McFarling has opened up a subject here that is very interesting; that is, the intestinal part of it. I am unable to discuss it because of the fact that I have never connected properly the points that he has brought up. If the correction of disturbances of digestion, or disturbances in the secretions of the bowels will correct numbers of these cases, I think it is worthy of our careful investigation and should receive it.

Actual infections, or actual involvement of the eye by focal—of the eye-ball I suppose he means, by focal infection, when he made the statement that the third series of cases, or third reason for infection through the blood stream was the one of the most importance; my experience has been that the direct extension of infections from the sinuses and from the lacrimal parietes has been very frequent as external diseases of the vision, but not as causes of probably the diseased conditions of the eye or the functional disturbances that he speaks of, such as headaches and pain, and things of that kind.

We all will recall numbers of cases of pain in the eyes and about the eyes when patients have come for correction of errors of refraction. Careful examination finds those cases practically normal, rather, as far as you can tell they don't require refraction work, and still those headaches will continue, or if they are corrected up with small correcting lenses, the headaches will continue. Those cases used to be spoken of probably as cases of asthenopia, and that is a very good word to use when you

don't know anything else to call it; there is a cause for those things; and if these points of infection as we note pyorrhoea conditions, abscessed teeth, abscessed or diseased and infected tonsil crypts, it produces these things, and if so it is only reasonable to believe that other focal infections might do the same thing. I think we should all pay especial attention to these points of focal infection, but not start in and remove everything the patient has, believing that some one or the other may be the point of focal infection. We must isolate the particular type of infection, or the particular point from which the infection comes, and correct that, rather than indiscriminately sacrifice tissues or the parts of the body that are not in any way causative of the disease. We haven't heard the end of this subject. Probably it is only opening up, and this section should be the pioneers in the work of localizing intelligently the points of focal infection as causative factors in diseased conditions of the eye.

*Dr. Westfall*, chairman: There is a wide field, and we ought to bring out some good discussion on this paper.

*Dr. W. T. Salmon*, Oklahoma City: There has been a great deal said on this subject of focal infection, especially focal infection of the eye from some condition, that has excited my interest, and I have come to the conclusion, as suggested by Doctor Ferguson, that it may be in its beginning and it is a subject which we know very little about. We know that the teeth and the tonsils, or wherever this first infection may be, have no predilection for infecting the eye, any more than they have for infecting any other part of the body. Therefore I have learned to believe and to look upon these conditions as a multiple infection. If there is a condition of the tonsil or of the nose that produces an infection of the eye, it must be that there is some other condition in the eye where it is lit up. Just like you have a tubercular in a latent condition, and you inject tuberculin. Then you get three effects. You get the local effect, which is irritating and containing all the symptoms of inflammation, pain, swelling, etc. And the secondary effect is a general one, which may be called the headache. The third condition is a focal one which may light this smoldering condition in it, one which may prove extremely dangerous.

The same may be said of a tonsil infection. If we have a contusion of the joints, a slight infection, of which a number of cases have been reported that they have had pain in their joints from time to time which caused little annoyance, and let them have a tonsillitis or pyogenic condition of the teeth, or

pyorrhoea, as soon, or we will say an acute attack of tonsillitis, this condition in the joints is lit up, and we immediately have a bad condition.

Now, I see no reason why that we should have a condition of the nose or of the tonsils that has traveled through the lymphatic stream and go into the eye and light up a condition there any more than it would anywhere else, unless we had a refracted area, some syphilitic condition, or some latent condition that was lying dormant. I think that when this condition is sifted down that we will treat those conditions as multiple infections, rather than just call it a focal infection.

*Dr. A. L. Guthrie*, Oklahoma City: Mr. Chairman, let us not forget that as men doing special work, that we are primarily physicians. We have a tendency to confine ourselves too closely to our own specialty. After we have determined to our own satisfaction whether any focal infection is due to the nose and throat, then we should refer these cases to men in other specialties. It becomes an inter-relationship of specialties to make an accurate diagnosis of the causative factors in focal infections. The gynecologist, the gastroenterologist, the man on internal medicine, the x-ray specialists, practically all specialties, should be considered in these cases. Our hardest point, in my opinion, is to determine and follow an accurate medical history in these cases so that we may determine to whom to send our patient. Too many of us want to hog the whole thing, instead of referring to somebody else. I only wish to emphasize that one point; that it is up to us to refer cases to the other man, as well as to expect him to refer cases to us.

*Dr. M. K. Thompson*, Muskogee: Mr. Chairman, I want to take a little issue with Doctor Guthrie, who just spoke, about the specialists in referring the cases to a general practitioner. Usually when they reach us, over in our town, they have had all their teeth pulled, and the tonsils taken out, and the appendix removed, and all such things as that, the surgeon has done that already, and so we have nothing left to refer back to, unless it is to send them to the chiropodist, or something of that kind, and they send them up there with this headache and eye trouble that they can't find any other excuse for or anything to do, they have taken out the appendix, and then we have got to fit them with glasses, or find why they have this headache, or this focal infection, or whatever it may be that is producing it, and so we don't find it, we attempt it, and we are bum oculists, and then they go to somebody else, and so I don't think that

we have to refer them back that way to the general practitioner, and we don't have to bother with the tonsils, because they have already been taken out; and as to these pains in the joints and the removal of the tonsils that have been mentioned, I usually, where there is no real cause for removing a tonsil, other than a submerged tonsil, nearly always have the pathologist take the drips, and unless they find some real organism there that we will say you have an infection there that would or could produce this trouble, I don't advise the tonsils to be taken out.

I take out and make a smear, and if we find there one of several organisms, why, then I advise them to be removed; otherwise I do not. Of course, I have had the teeth looked at and had the dentist make an x-ray picture, and see what that shows, and also the ear trouble, if they have any, and at the same time I believe I am like Doctor Ferguson and be very careful about this advising them to have the tonsils removed, but a little saying brings back, "if you don't take out the tonsils, somebody else will." The other man will do it, if they haven't already.

*Dr. R. O. Early, Ardmore:* In reference to intestinal infections; I don't know whether focal infections are overworked or not. I don't presume there is a child in the Oklahoma City high school that don't know what focal infection is. It has certainly been well advertised, but it is rather discouraging to remove tonsils and have a condition persist, and then have all the teeth extracted and have the condition exist, and I think that the Doctor's paper is timely, that we ought to be more careful. We might find it in other causes than we have been looking for, and especially we are always looking for them in our own sphere, and if these intestinal infections are causing some of this trouble, why, of course, those are cases that ought to be referred and get at the primary cause and not remove tonsils indiscriminately.

*Dr. L. A. Newton, Oklahoma City:* Doctor Thompson spoke about germs in the bacteria. I think about ninety-five per cent of the cases will show some pathogenic germ there, the streptococcus hemolyticus, it has been a question in my mind a great many times how to find out, or how to determine whether tonsils should be removed or not. I don't don't know, there is the blood count and all that, I don't think that there is any way positively of determining those things, except sometimes empirical work. I know I have removed some tonsils that have really been sent to me by men that said they should be removed, and I had my serious doubts about it, and I got some results, and I have had

others that I really felt were infected, and I removed them, and didn't get results. I remember a case about two years ago in which I had a lot of choroiditis that was causing a good deal of trouble, and had been running over a long period of time, and about three-quarters of diopters of astigmatism that was corrected. Doctor McHenry saw the case with me, and we decided the tonsils should be removed, and that case ran along, I guess it was in my hands about a year, and would keep recurring and recurring. Finally a young man in town got hold of the case after I went to the army, and he treated her for intestinal trouble, and it immediately cleared up and has not occurred since. And so I think that I don't know—that is another question—how we are going to determine whether it is intestinal or tonsil trouble, unless we go to work and give them a lot of empirical medicine. I wish there was some way that we could determine definitely, if anyone knows or they can give me any pointers on definite ways of finding out whether a tonsil is infected or not. The fact of the matter, a great many times with me it is questionable what I should do. A few times I have taken out quite a few. It is a question in my mind. I always tell them this way: That so far as we know, there are no harmful results, except you will have a sore throat for a few days. So I don't know, there is one blessing about removing so many tonsils, there have not been any serious results from it that I have heard of. There are no reports of it.

*Dr. A. G. McFarling:* Mr. Chairman, I thank the gentlemen for their liberal discussion of the paper. While some statements might appear dogmatic, they are not made that way because I expected to set the pace by any means, but merely for the sole purpose of provoking a liberal discussion.

I have called attention to a resume of Doctor Dwyer's paper from the fact that he in summing up said he wasn't able to get any results in his cases of iritis, retinitis, etc., from his intestinal treatment. I had treated those cases that I reported with such beautiful results, and I could mention others, but that was the most striking and therefore I chose it, and not because I think we can draw conclusions from any one case, but simply as an addition to what Dwyer had already said on the subject.

I heartily agree with the men who have discussed the paper that we should not indiscriminately remove tonsils whether or not they be infected, simply because we think somebody else will if we don't. And I also agree that we cannot always determine beyond the shadow of doubt that the tonsils are the infective point.

One point I would mention, however, touch-



ing upon what you just now asked for as to information on any definite point that no one has mentioned; perhaps it is not new to you; but somewhere I had seen some man call attention to the fact that there are two lymphatics right at the angle of the jaw always slightly enlarged, but never very much, just a very slight enlargement of those two glands nearest situated to the tonsils. You will find in slight enlargement that you can feel under the skin with your fingers, and you don't always find them. I don't think it has been absolutely proved at all, because we expect an enlargement of some of the lymphatics. But if you begin feeling the angle of the jaws of these patients, you will find there is one particular one that after removing these cases you will find the disappearance of these things, and if you can locate that one little gland, I don't know which one it is, but it is right at the angle of the jaw, and one very near to the tonsils. And one reason, perhaps, why it never gets any larger, in some of the most infected cases you will get a regular crow's nest out of the tonsils, and there is never a very large gland. Whereas, this particular gland in a non-infected case is not palapable. I have seen that some place. It is not original with me. I picked it up from some other man. I don't know who now. I couldn't tell you.

One main feature that I wanted to call your attention to was this fact, that in some particular case of so-called asthenopia that some man mentioned, in a case where we have corrected all the errors of refraction that we can find and tampered with the other things and used atropin indefinitely, and sent them over to the other man and some of those cases with headache still hold on, and we call them asthenopia, and we still call them that yet. This little case that I mentioned was a case that was referred to me with a history so clear-cut that the nurse at school said, "sure, it is his eyes." Every time he would sit down to read his lesson (he was a rather studious boy, and it didn't seem that he was trying to play hookey), he had this headache; and his family physician was consulted and he was sent over to see me. The case was so clear-cut that I said right off, "sure it is the eyes," because he was a well nourished boy, and there was no point of infection, he had no illness. The history was absolutely negative so far as anything of importance was concerned, and after the use of atropin I could only demonstrate one diopter of spherical condition. He wore those with apparently perfect results until he went to school, when the symptoms all came back exactly as before and with a like intensity. Well, they came back to me, and I had to find something else the matter with him; I began to ask all kinds of questions and went

over the case very carefully; I had never examined his throat, because there was no history to point to the throat or any point of infection at all. It was apparently a case of asthenopia. I was disappointed, frankly, at the time of examination to find that he only would develop one diopter of hyperopia.

*Dr. M. K. Thompson:* Where was the headache, Doctor?

*Dr. McFarling:* In the forehead. I didn't mention that point, but it was over the forehead. Well, I checked up the history very minutely. I didn't usually do it, sometimes in cases I would hurriedly run over a case and not make a complete history of my findings; but in that case I had written a complete history of my findings from beginning to end, and I hauled out this history in an effort to justify myself in the eyes of this mother who was plainly put out, and I went over every vestige of that history as carefully as I could, and compared it with the findings at that time. Absolutely correct. I could not find one place that I could vary. I thought perhaps that our friend who made up the lenses for us had maybe made a mistake, and I looked over those and verified the lenses, and they were exactly according to prescription, so I says, "it is a cinch there is something else the matter with this boy;" then I examined his throat carefully and I found these tonsils exuding pus, and I told the mother they should be removed. She was shocked, plainly, and said he never had any tonsillitis or any symptoms referable to the throat in any way, and she plainly took it with a grain of salt and went on. She told her husband about the case (it was an out of town patient) and they came back in about a week with instructions to remove the tonsils and the adenoid. These tonsils were large, and the adenoid was large, so that the tonsils were practically completely submerged. I was surprised to find the amount of pus in the tonsils, and also in this adenoid. They were filled with pus. There was a complete clear up of this throat. I told him to keep him out of school for two weeks and to bring him back to me in about two weeks' time for report; he came back with his head up, and says, "I want to show you I can read without these glasses and do without them as well as I can with them." And I instructed him to use them anyway, and I saw his mother since the writing of this paper, two or three days ago, and she said he had long since discarded the use of the glasses and was going to school.

The fact that interested me was this: This boy wouldn't have a headache from the absorption of this toxic matter from the tonsils, from the throat, without the refractive error, apparently, because when he didn't work on

close work. Put him out to do work in the fields, he never complained of headache, but the moment he went to read at the house or at home, or at school (and they said he was a boy that wanted to read at any place or at any time) that he began to read, the headaches occurred right away.

*Dr. Thompson:* How long has that been, Doctor?

*Dr. McFarling:* That has been a year. He has gone through this past term of school, and he laid off the glasses after about two weeks.

*Dr. Thompson:* How old is he now?

*Dr. McFarling:* About thirteen. He was twelve at that time. I am not attempting to lay down any rules or make any dogmatic statements, but it was an interesting case to me, from the fact that apparently this focus of infection didn't primarily produce the headaches, and yet when the focal infection was removed the use of the eyes, without or with the glasses, didn't bring on the headaches.

The question might be raised, if that boy hadn't had the refractive error to begin with, how long would he have gone with this focal infection without a headache, or would he have had a headache? No doubt he would later on. But this headache only came on with the use of the eyes. That was the striking feature of the thing to me and the thing that prompted me to write the history of it into this paper.

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#### PROCEEDINGS OF OKLAHOMA CITY CLINIC, ROUND TABLE, WESLEY HOSPITAL

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**Dr. A. L. Blesh:** *Leukorrhea—Radium in the Treatment of.*

Mrs. D., aged 52, consulted the surgical staff of the Clinic relative to several surgical disabilities December 1, 1920. Along with these troubles she was much disturbed by a profuse leukorrhea which had persisted for many years in spite of assiduous and vigorous local treatments and curettages.

While in hospital for the relief of surgical conditions mentioned, 50 mg. radium was inserted in the uterus for 12 hours, 600 mg. hours. No reaction. Returned in one month for another treatment at which time she was given 300 mg. hours intrauterine. She had passed the menopause two years before without incident and had "seen nothing" since but the leukorrhea, attended by severe pruritus vulva which had persisted and had become much more profuse.

There was no ascertainable cause found upon examination. The first treatment had given

her marked relief from both the discharge and the pruritis.

Twenty days after last treatment patient reports by telephone that discharge and itching have both almost entirely ceased.

*Remarks.* Curtis has shown that 60% of cases of leukorrhea with or without demonstrable cause are relieved by radium. Of course all patent lesions should be corrected. Since it is possible to precipitate the menopause by over-dosage, caution is necessary in its use during the active sexual life. In young girls and in women during the fruitful period 300 mg. hours should not be exceeded at one seance. In women past the menopause, as in cited case, larger dosage may be utilized. The rule is as in metorrhagia or menorrhagia, that the beneficial effect is about thirty days in appearing. As the menstrual epoch ensuing treatment may be increased, so may a leukorrheal discharge be at first increased.

The treatment of leukorrhea by any method heretofore tried has been so unsatisfactory that any method giving 60% results is to be welcomed.

But a method so potent must be used with caution. It is far better to give multiple treatments than to over-dose with a single one.

**Dr. D. D. Paulus:** *Case of Lymphatic Leukemia with Radium Treatment.*

Patient is man 64 years old. Family history negative. Always has been a well man except for malaria 25 years ago. Had hemorrhoid operation seven years ago. Influenza one year ago with rather slow recovery.

Present complaint. States that he felt pretty well during summer, but early last fall, five months ago, first noticed diminished endurance. Appetite good but has a feeling of fullness after meals with often gaseous eructations and considerable flatulency. Feeling of weight in abdomen. No urinary disturbances. Bowels tendency to constipation. No weight loss. Four months ago consulted physician on account of abdominal distress, who diagnosed malignancy and advised operative interference which patient refused. Three months ago patient consulted another physician on account of cough which he had developed, who diagnosed pulmonary tuberculosis and gave him serum treatments, however without apparent improvement. Has noticed mass on left side of abdomen for four months.

Physical examination. Shows a fairly well nourished, somewhat anemic man. Mucous membrane somewhat pale. Eyes negative. Teeth, many filled and in poor condition. Tonsils small but crypts filled with cheesy material. Chest shows no rales. Heart shows systolic murmur at base. Glandular system.

Cervical axillary and inguinal easily palpable. Some as large as end of thumb. Abdomen shows mass on left side extending beyond median line and midway between symphysis pubis and umbilicus. Prominent incisura noted on right side with firm borders. Liver palpable one inch below costal margin.

Laboratory findings. Blood: red 4,000,000; Hb. 75, leucocytes 40,000, diff. small lymph. 90%, large lymph. 2, eosin. 1%, Poly. 7%. Wassermann negative. Urine negative. X-ray shows enlarged mediastinal glands, very prominent. Stomach is seen to lie almost transversely over tumor mass. Bowels crowded to right side of abdomen. Diagnosis, Lymphatic Leukemia.

Treatment in this case is general dietary measures with iron internally to combat the anemia. He has received radium treatment over all the enlarged glands and over spleen. One week later he showed a leucocyte count of 31,000. He will receive two more treatments with radium one week apart which will complete the series.

X-ray can be used over the spleen but the effect from radium is practically the same while the period of remissions will be much more prolonged than with x-ray. No cure is expected, but the patient will probably have remissions. Therefore the radium will have to be repeated when symptoms become pronounced again.

**Dr. J. C. Macdonald.** *Tonsils as a Foci of Infection.*

J. S., age 18. Family history negative. Personal history, had measles and pertussis during childhood, otherwise was healthy and strong. Three years ago had a nervous attack following a fall, which resembled chorea. Had influenza in Spring of 1919, but was not very sick. Following this attack of "flu" had pain in hands and feet, and stiffness in back.

Began about four weeks ago with pain in muscles and joints apparently without temperature. This condition has gradually become worse. Pain seems to shift from place to place over body. He has not been confined to bed, but has been unable to work. Appetite has been poor.

Physical Examination: Rather well developed boy, blonde in type. Pupils equal and react to light. Pulse 108. Temperature normal. Teeth and gums in good condition. Tonsils extremely large and cheesy materials expressed from crypts. Pillars very much congested. Glandular system negative except for enlarged cervicals. Muscles flabby. Heart shows mitral leakage. Borders normal. Abdomen negative. Joints, especially of hand, are swollen and all of them are more or less sensitive.

Laboratory report shows Hb. to be 85 percent. White count 12100. Coagulation time four minutes. Urine negative except for a few hyaline casts and an occasional W. B. C.

Diagnosis: Subacute articular rheumatism with chronic endocarditis and probably myocarditis involvement, also nephritis. Etiology, probably infected tonsils.

Operation: Tonsillectomy with Sluder, also considerable adenoid tissue removed.

This case well illustrates the many complications which may result from a focal infection. Patient's father had been giving him some patent medicine, but as his condition continued to grow worse he consulted his family physician who advised tonsillectomy. Six weeks since operation patient's physician reports patient as being much improved, his appetite better, and he is rapidly gaining in strength and weight. Rheumatic condition practically disappeared.

**Dr. W. W. Rucks:** *Psychic Manifestation in a Hyperthyroid Patient.*

Case No. 1. Mrs. . . . . ., accompanied by her husband, came to our Clinic presenting the following symptoms. She is now 32 years old, has been married ten years and has one child. Has had no serious diseases except influenza in the fall of 1918. This attack was followed by otitis media from which she recovered slowly. She has been quite nervous for four or five years, but has been able to look after her household affairs, some literary work, and numerous social duties. Lately she has been growing more nervous, is easily exhausted, has a little evening temperature and has become irritable and suspicious. About three weeks ago she began to talk of trivial circumstances which had taken place in her past life attaching great importance to them, and even adding occurrences which her husband and others say did not happen. She talks with good sense and judgment concerning her daily life, and the events of the day, but when she talks of her past life she weaves the most impossible chain of circumstances, usually taking as a starting point some actual happening to which, until recently, she attached no great importance. And she has a great desire to investigate almost any happening she can recall and to know the motive of every act of each individual connected with it.

Physical examination is practically negative except that her thyroid is visually and palpably enlarged, especially the right lobe. Her pulse is rapid and she has a distinct tremor of the extended hand. Reflexes are exaggerated. Blood Wassermann is negative. Blood chemistry gives no abnormal findings. She responds positively to the Goetch adrenalin test for hyperthyroidism.

The psychosis is the most outstanding mani-



festation of her disease and it is because of this that she is brought to us for examination. The psychosis suggests dementia precox, but dementia precox usually manifests itself much earlier in life. The period of puberty is a crucial time for dementia precox. She lacks the abtunted state which is characteristic of the depressive or manic-depressive. Neither does she have the excitation of the maniacal phase of this disease. She is not free from some symptoms of paranoia. She manifests some persecutory delusions, but not to the extent of a paranoiac, and neither is she nearly so shrewd. Her psychosis is not of the degenerative type such as is caused by syphilis, alcohol, or drug habit. It suggests over-stimulation, hyper-activity which brightens her memory, causing her to call up past happenings, which had been forgotten and to attach undue importance to them. Perhaps some of the things she recalls and desires explained, and which cannot be recalled by any one else, are her unexpressed ideas, thought and desires which existed at the time and were suppressed, and now are revived and augmented by stimulation of brain cells. The enlarged and over-active thyroid gland, which she undoubtedly has, could be, and, in our opinion is the exciting factor, and we advised a sub-total resection of that gland. This was done by Dr. Blesh, but sufficient time has not yet elapsed to determine what effect it will have on her psychosis.

**Dr. M. E. Stout:** *Reports of Albee Bone Graft in Tuberculous Spine or "Pott's Disease."*

Mr. H. Case No. 6826. Age 22. Farmer. Entered hospital for examination October 15, 1920. Family history negative relative to cancer and tuberculosis. He was a strong, healthy boy, had the ordinary diseases of childhood with good recoveries. No serious sickness. Slight attack of "flu" two years ago. Good recovery.

Present trouble began one year ago while riding a cultivator. He first noticed a pain in the small of his back which was aggravated by jarring or stooping, especially by twisting motions. Had no temperature or other symptoms and continued his work fairly well through the winter up to March when the pain became so great that he remained in bed for three weeks and after he was up his spine was stiff and continued to pain him especially upon stooping or jarring. He is coughing some and has lost considerable weight and strength.

Physical examination shows eyes normal. Teeth and gums fair condition. Tonsils large. Mucus membrane pale. Complexion sallow. Right cervical gland enlarged to the size of lima bean. Heart negative. Right apex retracted with dulness, impaired resonance and

fine moist rales. Left apex impaired resonance. No rales.

Dorsal vertebrae displaced to right and quite tender to deep pressure. X-ray of chest shows both lungs positive for tuberculosis. Right somewhat more advanced.

X-ray of spine shows body of second lumbar vertebra broken down with beginning abscess formation. Sputum and urine negative.

Operation October 27. Bone graft six inches long taken from tibia and inserted into spinous process of diseased vertebrae under gas anesthesia.

Patient was kept flat of back in hospital six weeks and force feeding was begun after the first week. Both wounds healed by primary union. Patient gained twenty pounds in weight. X-ray showed graft united and the patient left the hospital free from pain. A brace was fitted to the back as a safeguard, though this is usually considered unnecessary.

I have recently heard from patient and he reports that he continues to gain and that he is free from pain.

Albee states that every case of "Pott's Disease" should have a bone graft operation, and it certainly gives them the quickest, and in my opinion, the most permanent relief.

The lungs are practically always involved, but by the use of gas anesthesia there is very little danger of lighting up this lesion and they always improve during the convalescence from the operation.

**Dr. W. H. Bailey:** *Report of a Case of Chorion-Epithelioma (occurring in the service of Dr. A. L. Blesh.*

Patient, female, age 42, white, housewife.

Family history: Negative except that father had epithelioma of face. Personal history: Usual diseases of childhood, pneumonia at 18. Menses began at 14, normal and regular; last regular period five months ago, since which time has been flowing more or less continuously; para five, oldest 18 years, youngest two years, all living and healthy. Suffered lacerations with confinements but was repaired three years ago and has had good health until five months ago when irregular bleeding began. No pain except slight backache. Only five or six pounds loss in weight.

Physical examination: General examination negative. Pelvic examination shows p rineum in good repair, cervix hard and resistant, uterus enlarged but freely movable, normal consistency, free blood issuing from cervix.

Clinical diagnosis: Carcinoma of body of uterus.

Operation: Pan-hysterectomy except right ovary and prophylactic appendectomy.

Gross Pathological description: Uterus markedly enlarged and of lessened consistency, smooth regular outline with no adhesions, no evidence of ulceration of cervix although cervical canal is somewhat dilated. Tubes and left ovary and appendix normal. On section the uterus cuts with lessened resistance, muscle considerably thickened, paler than normal and degenerated in appearance. Mucosa of cervical canal normal. A very little distance above the internal os the mucosa becomes roughened, friable and necrotic in appearance. Nearly the entire mucosa of the body and fundus shows a thickness of about 1 cm. and markedly infiltrated into the musculature.

Microscopic Pathology of Uterus: Shows a chorion-epithelioma instead of adenexo-carcinoma as we had expected.

Subsequent history: Patient made a rapid and uneventful recovery at first, but returned in about five months with a vesico-vaginal fistula. It will be interesting to follow this case to see if the previous condition aside from the operation had anything to do with the formation of the fistula, and if it will remain healed when repaired.

#### *Report of a Case of Hydatid Mole.*

Tissue referred to us by Dr. F. H. Clark, Oklahoma City, who kindly furnished us the clinical history. Mrs. X, 26 years, married 10 years. Para three, oldest 7 years, youngest 2 years.

Family and previous medical history negative as affecting this condition. Menses normal, last period June of last year, missed July and also August. Diagnosed pregnant at that date. In September had slight bleeding with threatened abortion; in October grew worse; in November the discharge from the uterus became brown in color and offensive. In December the bleeding grew more profuse and a curettage was decided upon.

The material received at the laboratory which was only a small portion of the entire material removed, was about 3x5x4 cm. rather loose structure and when floated out in water was found to consist of a loose sponge-like mass from which extended small shreds or strings of small cysts which varied greatly in size. On microscopic examination this gave a typical picture of proliferated chorionic villi of a hydatid mole with no evidence of a syncytioma.

The hydatid mole or hydatidiform mole and the chorion-epithelioma or syncytioma malignum are tumors that arise from fetal structures. They are formed by the proliferation of the cells of the chorionic villi, the syncytial cells and the cells of Langhans. Although the chorioma has the name epithelioma suffixed to

it by some authors, it does not follow the typical course of epitheliomas and it metastasizes almost wholly by the blood stream.

The close relation of the hydatid mole and the syncytioma is shown by the fact that more than half of the syncytiomas are preceded by hydatid moles and that about the same proportion of hydatid moles develop into choriomas. Many instances of both conditions are preceded by normal pregnancies or miscarriages.

From a diagnostic point of view, these two conditions naturally have many points in common. The history of uterine hemorrhage, often quite profuse, is suggestive, especially if it follows abortion or a normal pregnancy. Often the hemorrhages appear during the course of an otherwise normal pregnancy. Fibroids complicating pregnancy and retained placenta following labor may give nearly the same clinical picture as either of these two conditions.

An interesting point, as to prognosis, in cases of syncytiomas is that very occasionally if the original tumor is completely removed by a hysterectomy or even a curettage, the metastatic implantations gradually disappear and give no more trouble. The usual course, however, of late cases is rapid metastasis and a fatal termination.

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### PROCEEDINGS OF ST. ANTHONY'S HOSPITAL CLINICAL SOCIETY.

DR. S. R. CUNNINGHAM, Pres.

DR. A. D. YOUNG, Secy.

OKLAHOMA CITY

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### DEATH REPORTS

#### **Dr. G. A. LaMotte:** *Traumatic Hemorrhage of Lung.*

Mr. J. C. M. entered hospital January 28th, in an ambulance, about three hours after a crushing injury of the chest. At the time of injury he spit up some blood, but by the time the physician had arrived the hemorrhage had ceased. The patient was put to bed and told to keep absolutely quiet. An hour later the physician was called again and the patient found in a state of collapse. The patient died twenty-six hours after entrance.

Post-mortem examination was advised against by legal representatives, since none of the patient's relatives could be located.

Death was result of hemorrhage that recurred and filled up the lung, the patient being too weak at the time to cough the blood up.

#### **Dr. L. E. Andrews:** *Asphyxia in Premature Baby.*

The patient's mother is a para 11, and urin-

analysis since her entrance to the hospital shows considerable albumin, few red blood cells, and many white blood cells. Wassermann reaction negative.

The mother says that her first pregnancy was uneventful until the seventh month, when she developed swelling of the feet, legs, arms and face, and the physician who attended her found considerable amount of albumin in the urine. She delivered at the beginning of the eighth month of pregnancy. The baby was blue, and weighed a little over four pounds, was made to cry only after great effort, and after breathing feebly for several hours, died. The mother had been given "twilight sleep," and this was thought to have affected the baby.

This child was born at the end of the seventh month of pregnancy, on January 2nd. It was with great effort that it was made to cry. There seemed to be a considerable amount of mucus in the throat. As much was removed as possible. The baby was kept warm with water bottles, but its cry was feeble. It took water and nourishment only after much effort, and regurgitated much of its food. The following day, large moist rales were heard all over the chest. The baby continued to cry feebly, was cyanotic. The condition grew worse until it died on the second day, of asphyxia.

**Dr. J. W. Riley:** *Chronic Myocarditis, Operative Shock, Carcinoma of the Uterus (Fundus).*

Mrs. G., age 68, para III. At the age of forty-five she was operated for an intra-abdominal tumor. This was followed by an immense post-operative hernia. Her menses ceased at age of forty-two. Two years ago she began to flow again. During the past month she has had a continuous, foul smelling discharge. There has been no change in weight.

Examination shows cervix negative; fundus enlarged to size of an orange. Patient is very obese, and together with this large ventral hernia and cardio-vascular degeneration, she was a very poor surgical risk.

I was unable to satisfactorily bring the uterus down into the vagina, so it was necessary to operate from above, which first necessitated repair of the hernia. Radium treatment was thought of but discarded as being unsatisfactory. During the removal of the uterus the patient's breathing became very shallow, color ashen, pulse weak but not rapid.

Death due to chronic myocarditis, operative shock, carcinoma of uterus.

**Dr. R. L. Murdock:** *Bronchopneumonia.*

Mr. F. M., age 32, entered hospital on

January 2nd, four days after onset of disease, which followed a cold of five or six days, and close association while caring for his wife who had pneumonia. The symptoms were severe pain in the left upper chest, especially posteriorly, and violent coughing with "prune juice" sputum. Examination showed pulse 120, respiration 60, temperature 102.5, and crepitant rales in upper lobe posteriorly. Patient was advised, when first seen, to be taken to hospital, but did not do so. Home treatment was instituted. On the fourth day the patient became delirious, pulse 110, temperature 102, respiration 60, B. P. 120-84, expression haggard. He was then moved very carefully in an ambulance to the hospital, where examination, without disturbance of position, showed a dull note, tubular breathing, and crepitant rales over entire left chest. W. B. C. 15,400, polynuclears 86, lymphocytes 14. Temperature 104.6. Proctoclysis of sodium bicarbonate and glucose given. Digitalis by mouth in M 15 doses, and digipuratum grains 1-150, and camphor in oil M 15, alternately every two hours. Codein for respiratory distress. Patient gradually grew worse and died on the fifth day of the disease of bronchopneumonia.

**Dr. A. W. White:** *Gastric Ulcer. Cause of death undetermined.*

The patient, a woman 42 years of age, of large frame, but apparently having lost some fat, entered the hospital on December 5th, complaining of pronounced burning sensation in the epigastrium, relieved by taking small quantities of food. Large meals produced bloating and vomiting. Appetite voracious; sleep poor in later part of night; bowels constipated; recent history of tarry stools. Careful investigation and observation led to the diagnosis of gastric ulcer. A rather interesting fact developed in the investigation; a very pronounced retention of food and no retention of the barium meal. She was placed on management, to which the stomach responded steadily, i. e., a gradual favorable change in the gastric chemistry, relief of gastric symptoms and later pronounced diminishing of retention. During her stay in the hospital she suffered two attacks of acute pain in the epigastrium, accompanied by more or less rigidity of all of the voluntary muscles of the body. The first attack lasted but a few minutes; the second was relieved at its onset by gastric lavage. A third attack occurred on the evening of January 4th. One of the Sisters visited the patient at 9:50 p. m. and found her in an apparent hysterical seizure. The interne was called. His report at 10:00 p. m. is as follows: Patient in stupor, eyeballs rolled upward, respiration eight per minute, pulse very fast and thready, fingers and lips cyanosed. 10:05,



patient dead. Cause of death not determined. No autopsy was allowed.

**Dr. R. M. Howard:** *Apoplexy, Contributory Operation for Goiter.*

Miss. L. A., white, age 57, entered hospital December 26th, 1920. For past four years she has noticed palpitation of the heart, tachycardia on exertion, extreme nervousness, loss of weight, muscular weakness and the presence of a goiter. She has had frequent dizzy spells, many attacks of smothering and shortness of breath. For past month there has been some edema of the feet.

Five years ago she had a nervous breakdown, and a stroke of paralysis involving the left side. History of this indefinite. At present she has complete control of her arms and legs, with no perceptible weakness. Eyes negative. There is a large nodular goiter present, which seems fixed in position. Pulse 92, B. P. 160-100. Heart enlarged to the left. Systolic murmur at the apex. There is a fine tremor in the fingers and tongue. Reflexes normal. She has lost twenty pounds in weight. Blood and urine show nothing abnormal.

She was kept in the hospital in bed until January 17, 1921, showing considerable improvement in her general condition, digitalis being given to support the heart. On that date she was operated on under local anesthesia, a large right lobe of the thyroid resected and a substernal goiter the size of a small grape fruit removed. This was a cystic adenoma. Some difficulty was experienced in controlling the bleeding from the capsule of this tumor and packing was placed in the pocket from which it was removed. She lost but little blood and came off the table in good condition. Convalescence was uneventful until the fourth day when she suddenly developed a left sided hemiplegia from which she died twenty-four hours later. This was first manifest ten minutes following an intravenous injection of digipuratum, which was given by my direction, as a guard against the likelihood of some heart trouble developing, as I now believe not a very good reason.

Cause of death: Apoplexy, contributory operation for goiter.

## CASE REPORTS

**Dr. A. A. Will:** *Spina Bifida.*

Baby X, white, age 4 weeks, is a full term baby, and is normal in every respect except for the following: A tumor mass the size of an orange, which protrudes from the sacral region, and which is rather bluish color, and is of fluctuant consistency. The overlying skin is thin, but not markedly excoriated, the mother having taken special care in cleanliness of the

parts. When first seen two weeks ago, together with Dr. A. D. Young, a spastic paralysis was present in both legs, and the little fellow paid practically no attention to skin irritation over the legs. The rectal sphincter seems to be present. However, there has been incontinence of urine and feces. There is a suggestion of club-feet. Since then there has been some improvement—there is less spasticity of the leg muscles and sensation is more noticeable.

This case comes under the head of congenital malformations of the spine, and the lower bowel and rectum. Briefly the classification of the lower bowel and rectal malformations may be subdivided into those that open into: (1) the bladder, (2) deep urethra, (3) median raphe, vagina, or uterus, and (4) those that form a blind pouch. These spina bifida cases may be associated with meningocele or meningo-myelocele, or only a sacral dimple may be manifest. (Chart demonstrations).

This case, I believe is a spina bifida with involvement of the meninges and cauda in the tumor mass.

## Discussion

**Dr. A. D. Young:** This type of tumefaction may be divided into meningocele and myelomeningocele. Repair is easy if only the spinal cord coverings are involved, but it is very difficult to preserve the integrity of the cauda. If the cauda or cord element is involved, spasticity and club-feet may be present. Here the nerves are defective and matted into the cord coverings, and repair would be difficult. The chances of cure by repair are not very great and the chances of killing the child by subsequent infection are great. In meningo-myelocele it is usual for the patient to die of meningitis. Operation might be attempted here later, if the child tends to improve.

**Dr. W. A. Fowler:** The etiology is interesting. Congenital malformations are usually one of two types: inflammatory (syphilis or other infection) or evulsion of the arching processes. Sometimes there is history of a very hard fall in the second month of pregnancy. I know of no cures by operation.

**Dr. W. M. Taylor:** Holt classifies these cases as follows: 1. Fluid back of the cord. 2. Communication in front of the cord—with pushing out of cord. 3. Fluid in the cord canal—find associated hydrocephalus. 4. Spina bifida occulta—opening in canal through foraminal notches, and project into the body cavities. I believe this case is of the second type.

**Dr. L. E. Andrews:** I had an interesting case of the last type a few years ago. It closed early, with one pouch on each side and communicating above. Had no club-feet, no

spasticity. Sac was aspirated two or three times. Patient seems normal now.

*Dr. J. W. Riley:* From the literature, my idea is that hydrocephalus is associated in all cases, even in the closed ones. Spina bifida occulta is what is commonly known as the sacral dimple.

*Dr. Will,* closing: Injection of water, alcohol, etc., has been used to stimulate closure. I do not believe operative procedure is indicated here now. In some cases a colostomy followed by the three stage operation gives relief in involvement of the bowel. Apparently there are no defects above the spina bifida. If the child lives to be two or three years old, I believe it safe and sane to do something of an operative nature.

**Dr. E. S. Ferguson:** *Syphilitic Iritis, papular form.*

Mr. L., white, age 18 years. About four months ago a chancre developed on the penis, for which he had no treatment except some slight local application used by himself. About one month ago he noticed the left eye reddened and slightly sore, but had no real pain. This inflammation continued to increase until he presented himself for treatment, one week later. Examination showed a yellowish red papule on the upper and lower border of the iris with a fusion of the two nodules in the pupillary space.

This form of syphilitic iritis is a secondary manifestation and the papules vary in size from a pin head to large proportions, as in this case where they were about the size of two split peas. Some authors (Fuchs) call this type of infection iritis papulosa, in contradistinction to the true gummatous formation which appears sometimes as a late manifestation of syphilis. The papular form shows no tendency to break down or suppurate and generally leaves the iris clear on disappearance, with the exception of posterior synechia at the point of contact with the lens capsule. The characteristic salmon color, with location generally on the pupillary margin, although occasionally at the ciliary border, makes the diagnosis fairly easy, even though you have no history to guide you. Dr. Taylor has this young man in charge and the eye symptoms are rapidly disappearing under his treatment. Locally, hot applications with free use of atropin has been the only treatment. I want to emphasize the fact that this type never suppurates or breaks down.

### Discussion

*Dr. C. B. Taylor:* Dr. Ferguson omitted to say at the time I saw the patient he (patient) had a maculo-papular eruption and still had an unhealed chancre.

Treatment of syphilis here should be in-

tensive. Potassium iodid to iodism. Mercury to pyrali m. He showed no effect of treatment for ten days. I am now giving him neo-salvarsan, 0.6 grains, every five days; cyanide of mercury, grains 1-3 three times a week; potassium iodid, 35 to 40 grains t. i. d.

Secondaries heal without scar. Tertiaries always leave a scar. This is proof that this is a secondary lesion. I want to emphasize early and intensive treatment—otherwise the second eye may soon become infected—and should be treated over a long period of time, this case at least two and one-half years.

*Dr. H. Coulter Todd:* I never saw a case of such a large papule. I must take exception that it always comes early—I saw one later. The uveal tract is most often involved in acquired than in hereditary cases.

*Dr. D. D. McHenry:* The secondaries are salmon colored, and are found most often on the pupillary margin, rather than on the base. Gumma usually involves the ciliary body and is more yellowish in color. The second eye is not involved in secondary as often as in the tertiary stage.

*Dr. A. A. Will:* I would like to know of the advisability of using arsenic and the danger of its causing blindness.

*Dr. E. S. Ferguson,* closing: I cannot agree that the majority of uveitis is acquired. This particular type is always secondary. May have secondary lesion at the base, and it is not uncommon to have a lesion in both eyes.

I want to emphasize one point in treatment—give full doses of potassium iodid, even to toxicity—it is not a question of the iodid curing the syphilis, but it does hasten clearing.

As to arsenic and blindness—the consensus of opinion is that blindness is not caused by the arsenic, but produced by the existing disease.

### INDUSTRIAL EPIDEMIOLOGY

A plan is outlined by William Alfred Sawyer, Rochester, N. Y. (*Journal A. M. A.*, Oct. 16, 1920), to help in curtailing the large waste due to very frequent and all too common colds and their resultant conditions. In the company with which he is connected it is estimated that last year ten and one-half days for each employee were lost because of sickness, and he believes it is safe to say that a very large proportion of that lost time can be attributed to such conditions as colds and their sequels, focal infections of teeth, tonsils, sinuses, gallbladder, etc., together with the resulting conditions from dietary indiscretions and lack of proper exercise. The best method of practical prevention of these conditions in industry is a real physical examination, both at the time of entrance to employment and later, at stated intervals, which will, among other things, give an analysis of individual capabilities and susceptibilities, placing workers where they will not endanger their well-being through lowered resistance or uncorrected impairments. If epidemiology along these lines, or any other, is to mean anything, thoroughgoing physical examinations, the best working conditions, and health education are the three fields open to cultivation.

PROCEEDINGS OF UNIVERSITY  
HOSPITAL CLINICAL  
SOCIETY

December 3, 1920

## Case Reports

**Dr. W. M. Taylor:** *A Case of Mongolian Idiocy of the Less Pronounced Type.*

V. M., age 7 years. Admitted to Children's Service November 24, 1920. Chief complaints were post-nasal obstruction thought to be due to adenoids, blephoritis-marginalis, and inability to talk.

Family history: 7 children, 3 of whom are idiots. No history of birth injury. Laboratory reports, negative.

Physical examination: Shows a well nourished, active child, apparently 5 to 7 years of age. Other physical examination negative except as will be mentioned here.

Facial expression is that of a mental deficient and at once gives one the impression of the mongolian type. Head is round, small, and shows a shortened anteroposterior diameter. Hair rather abundant, lacks lustre but not markedly coarse. Skin dry and rough but none of the myxedematous feel of cretinism. Eyes are almond shape, prominent, appear to have an inward slope and a squint is noticeable. Eczematous condition about the lids.

Nose is small with broad base and narrow nostrils. Ears show lack of lobes. Mouth small, tongue does not protrude. Teeth fair. Tonsils but slightly enlarged. Limbs about normal in length and contour. Hands and fingers not short and blunt as seen in cretinism. Inward curve of both little fingers at distal phalanx. Heart normal.

Mentality: He has a happy disposition, plays, and is quick, etc. He is quick to notice noises, and playthings, especially mechanical toys, seemed quite interested in a bicycle and seemed to know what it was for. Observes other children in the ward. Feeds himself and shows the nurse where to put tray when brought in. Makes sounds but no effort to use words.

Diagnosis based on facies, mentality, and physical examination showing abnormalities belonging to the type of idiocy known as mongolism. The signs and symptoms of mongolism are not as pronounced in this case as they often are, but sufficiently characteristic stigmata of degeneration are present to make the diagnosis clear.

**Dr. C. J. Fishman:** *Typhoid Fever with Unusual Complications.*

Patient colored, age 34, Hospital No. 11583; entered hospital October 16, 1920. History of onset of chilly sensations with pain in the

head and fever and slight cough for a period of two weeks. Subjectively she felt very sick. No epistaxis. Bowel movements were loose, probably from the use of cathartics.

Personal history: Sixteen years ago had an attack which was called malaria. Influenza one year ago. She has had two children, normal deliveries. Complains of leukorrhea at times.

Family history: Negative.

Present illness: On entrance to hospital temperature 103, pulse 110, and respiration 24. Temperature ranged, on average, 102 to 103.4; pulse about 100 or often below.

Physical examination: Lungs, few diffuse rales. Heart negative, blood pressure normal. Noticeable rigidity of the recti muscles of the abdomen. Spleen not palpable. Vaginal examination negative.

Patient had general appearance of sepsis with anxious look and boardlike abdominal rigidity, so that the opinion ventured was that of an acute abdominal condition in which the peritoneum was involved. Perforation occurring in typhoid fever was considered on account of the history of illness for two weeks without pain, but with headache and slight cough, followed by sudden onset of abdominal pain with the septic appearance of the patient and the board-like abdominal rigidity, portraying a picture of a perforation during the course of typhoid. It is possible that there was no complete, definite perforation present, but that the peritoneum was involved as it might easily have been by the ulcer through the muscular coat and the presence of a local peritoneal involvement in which there were inflammatory products developing upon the peritoneum which acted as a barrier against further perforation that might occur.

The leucocyte count at the time of her entrance varied from 12,000 to 19,000, of which 60% to 65% were polynuclear cells. On the fifth day of her stay in the hospital, her abdomen became softer and there was less tenderness present. The leucocyte count dropped to 8100 and the Widal, which was negative at the time of her admission and remained so after repeated trials, became positive on October 26th, ten days after her admission. Her temperature gradually became lower so that about two weeks after, it was normal and remained so for 5 days. It then rose and stayed 103 to 104 for two subsequent weeks and then gradually returned to normal. During this period typhoid bacilli were recovered from the urine and her leucocyte count was generally low, 4500 to 9000.

Subsequent to her return to normal her appetite increased and she felt quite well without further complications developing.



# THE JOURNAL

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Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

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### EDITORIAL

## GENERAL PERSHING ON OUR MEDICAL CORPS

### *Administration*

### *Medical and Sanitary Conditions*

28. The general health of our armies under conditions strange and adverse in many ways to our American experience and mode of life was marvelously good. The proportionate number of men incapacitated from other causes than battle casualties and injuries was low. Of all deaths in the American Expeditionary Forces (to September 1, 1919) totaling 81,141, there were killed in action, 35,556; died of wounds received in battle, 15,130; other wounds and injuries, 5,669; and died of disease, 24,786. Therefore, but little over two-sevenths the total loss of life in the American Expeditionary Forces was caused by disease.

Our armies suffered from the communicable diseases that usually affect troops. Only two diseases have caused temporarily excessive sick rates, epidemic diarrhea and influenza, and of these influenza only, due to the fatal

complicating pneumonia, caused a serious rise in the death rate. Both prevailed in the armies of our Allies and enemies and in the civilian population of Europe.

Venereal disease has been with us always, but the control was successful to a degree never before attained in our armies, or in any other army. It has been truly remarkable when the environment in which our men lived is appreciated. The incidence of venereal disease varied between 30 and 60 per thousand per annum, averaging under 40. Up to September, 1919, all troops sent home were free from venereal disease. The low percentage was due largely to the fine character of men composing our armies.

29. Hospitalization represented one of the largest and most difficult of the medical problems in the American Expeditionary Forces. That the needs were always met and that there was always a surplus of several thousand beds, were the results of great effort and the use of all possible expedients to make the utmost of resources available. The maximum number of patients in hospital on any one day was 193,026, on November 12, 1918.

Evacuation of the sick and wounded was another difficult problem, especially during the battle periods. The total number of men evacuated in the Zone of the Armies was 214,467, of whom 11,281 were sent in hospital trains to base ports. The number of sick and wounded sent to the United States up to November 11, 1918, was 14,000. Since the Armistice, 103,028 patients have been sent to the United States.

30. The Army and the Medical Department were fortunate in obtaining the services of leading physicians, surgeons, and specialists in all branches of medicine from all parts of the United States, who brought the most skillful talent of the world to the relief of our sick and wounded. The Army Nurse Corps deserves more than passing comment. These women, working tirelessly and devotedly, shared the burden of the day to the fullest extent with the men, many of them submitting to all the dangers of the battle front.—(Ext. Final Report of Gen. John J. Pershing.)

## UNIFORMITY AND SIMPLIFICATION OF INSURANCE BLANKS AND UNIFORMITY OF EXAMINERS.

That adoption by life insurance companies of uniform medical examination blanks undoubtedly would result in the highest efficiency and that some such step has not long ago been taken is a matter of wonder to many examiners who have noted the dangerous possibilities due to the extremes of brevity on one hand and

tiresome duplication on the other. That each company seeks to attain the same end by examination report is sufficient inducement to impel medical departments to consider the best form of report which when completed by any honest, efficient medical examiner, gives the Chief Medical Officer of any given company the true, accurate data upon which intelligent conclusion may be based.

Dr. S. DeZell Hawley, Tulsa, Medical Director of the Atlas Life Insurance Company, has gone a step further than this in advocating to the national body of life insurance medical directors selection of uniform lists of medical examiners as far as practicable. This too seems a move of good sense for it is a well known fact that inefficient medical examination and report has been more than the order of the day and has cost insurance carriers untold thousands which would have been saved to them by efficient, impartial examination and report. A similar increase in efficiency and saving of valuable time to hundreds of Oklahoma doctors seems to be possible in rearrangement of the present blank used by the State Industrial Commission. Judge Baxter Taylor, chairman of the commission, is sincere in welcoming suggestions to increase the efficiency of that blank.

### OUR NEW MEDICAL (?) BOARDS.

The eighth Oklahoma legislature has created a special board of examiners for the chiropractics and while they were on their rampage they "created" another scientific body, a special board for the osteopaths. A remarkable feature of the latter is this joker:

"No osteopathic physician or osteopathic physician and surgeon shall use or prescribe any drug or chemical, the nature and use of which is not taught in the curriculum of recognized colleges of osteopathy, and the violation hereof shall be punishable as a misdemeanor under the general laws of this state."

As is well known many osteopaths of Oklahoma have been practising medicine by administering drugs for a long time and this last straddling of the scientific fence, admission that for many years of their existence they have been mistaken in that they had a "cure-all" in their so-called science and that in the end we shall probably see the osteopathic end of their science reduced to what it should be, the level of massage and similar adjuncts to scientific medicine. The crux of the matter lies in the information that any *osteopathic* school ever taught or pretended to teach the administration of drugs.

### Abstracts, Observations from Current Medical Literature

CONDUCTED BY

RADIOLOGY AND DERMATOLOGY—Dr. Chas. H. Ball, Daniels Bldg., Tulsa.  
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EYE, EAR, NOSE AND THROAT—Dr. L. C. Kuvrkendall, McAlester.  
GENERAL—INDUSTRIAL MEDICINE—PUBLIC HEALTH—Dr. L. A. Mitchell, Frederick; Dr. J. L. Austin, Durant.

### RADIOLOGY AND DERMATOLOGY

Dr. Chas. H. Ball, Tulsa.

#### INFECTIOUS ECZEMATOID DERMATITIS

In a series of 74 cases selected at random and scattered over a period of two years, Sutton (J. A. M. A.) found a record of concurrent urticarial eruptions in 19 instances (more than 25%). The antecedent disorders varied greatly. As a rule the anaphylactic manifestations did not appear until after the staphylococcal disorder was well under way. All of the attacks were nonfebrile. As a rule the earlier lesions were frankly suppurative (of 14 cases in which cultures were made, staphylococcus aureus was recovered in 11) and autoinoculable. In the earlier stages of the disease Sutton has found that a mild astringent, such as an aqueous solution of aluminum acetate (0.5%) or even lead and opium lotion (lorio opii et plumbi subacetatis) is more effective than one of the greasy preparations. At the end of 48 or 72 hours, however, one may profitably begin the use of a weak ammoniated mercury ointment (2%) together with a bland dusting powder containing a small amount of boric acid. After the tendency to suppuration has been overcome phenolated zinc oil may be substituted for the mercurial ointment. For the relief of the pruritus which often accompanies the urticarial lesions, calamine lotion, to which liquor carbonis detergens (from 2% to 10%) has been added, affords much relief. If necessary, a small amount of phenol (1%) or menthol (0.5%) may be added to the mercurial preparation, and the ointment used in conjunction with the lotion. Internally, alkaline preparations, such as sodium acetate and sodium citrate in large doses, combined, if the patient is nervous and irritable, with the sodium bromide, frequently prove helpful. If these two fail, Sutton has found the most serviceable remedy to be a mixed staphylococcus vaccine. The initial dose should be small (from 25,000,000 to 75,000,000) and he usually repeats the injections every third day, gradually increasing the amount each time.

#### A SERUM AGAINST SOFT CHANCER, ESPECIALLY ITS BUBOES

(John Reenstierna, Acta Dermato-Venereologica.)

Dead and living streptobacilli were intravenously injected into rats, and the resultant serum was found to agglutinate Ducrey bacilli. This serum has been proved effective therapeutically, and its activity is further enhanced by the addition of a certain quantity of dead "feverizing" bacteria (e. g. the typhus bacillus). Previously obstinate lesions have healed rapidly under this treatment, aided, of course, by the usual local therapy. The period of treatment of the buboes, which previously, according to many statisticians, had been a month or more, has been brought down to somewhat more than one week. The inconveniences of this treatment are chills and fever after the injection, considerable tenderness for several days at the seat of injection, and sometimes a passing tenderness in regional lymph nodes.

### STATUS OF THE LUTIN TEST

Louis Hannan, in the *Medical Record*, says that, of 100 unselected cases, 11 patients reacted positively to the luetin test. None responded to antisyphilitic treatment. In checking the influence of medication on the test, mercury and iodids were given for two or three days prior to the application of the luetin, and in 30 consecutive cases the reaction was positive. Mercury alone was given to 10 apparently normal persons, and the luetin tests made following its use were all negative. Some time later 6 of the 10 were tested in a similar way, substituting iodid for mercury, and all reacted positively. The author concludes that the drug reactions are due solely to the iodid, and that the test as now used is unreliable and should be eliminated from standard textbooks.

### A CONTRIBUTION TO THE ETIOLOGY OF VITILIGO VULGARIS, WITH SPECIAL REFERENCE TO SYPHILIS

(Shin' ichi Sasamota, Japan, *Ztschr. f. Dermat. u. Urol.*)

During the past year the writer studied 42 cases of vitiligo with special care to determine the relationship of this condition to syphilis. Of the 22 patients, who were 20 years of age or older, 12 showed positive signs of syphilis and positive Wassermann tests. In one case there was tabes, with the characteristic pupils, reflex signs and lancinating pains. In one case the skin changes disappeared after treatment with arsphenamin and mercury. In the remaining patients, younger than 20 years, three showed positive signs of erbsyphilis, and in five the Wassermann reaction proved positive. Two of these cases showed positive signs of hereditary syphilis.

### FREQUENCY OF SYPHILIS WITH CANCER OF THE LIPS, TONGUE AND BUCCAL MUCOUS MEMBRANE

(N. Austin Cary, J. A. M. A.)

The author's conclusions are based on a study of 907 case histories from the Surgical Pathological Laboratory of the Johns Hopkins Hospital. Syphilis in association with cancer of the tongue is approximately three times more common than in other locations about the mouth—14.5%, or about one in seven cases. This very fact is urgent reason against protracted antisyphilitic treatment in tongue lesions which may be cancer, even in the presence of positive evidence of syphilis. Regardless of the casual relationship of syphilis to cancer, once a neoplasm has been established the prognosis is that of cancer and not of syphilis, and treating the syphilis will not affect the cancer, but will only delay urgently needed surgery.

### RADIUM TREATMENT OF RADIO-DERMATITIS

(Degrais and Bellet, *Presse Medicale*)

The authors emphasize the excellent results which can be obtained in chronic radio-dermatitis by radium treatments without the sacrifice of the affected members, which is usually advised by the surgeons. They report three cases of professional radio-dermatitis which showed keratoses, indolent ulcerations and epitheliomatous formations on the hands. Healing took place under radium treatment and the intense pain also responded to this form of therapy.

### THE TREATMENT OF DERMATITIS HERPETIFORMIS WITH THE X-RAY

(Wilhelm Lier, *Arch. f. Dermat. u. Syph.*)

Three patients who were under observation for a period of several years were resistant to every conventional form of treatment for Duhring's disease. The X-Ray (dosage 3. H.) gave immediate relief. At the time of publication of the article a review of the literature gave but one instance of X-Ray treatment of this affection.

The health of some children of a syphilitic is no indication of his cure. He may procreate syphilitic children shortly after his infection, go through a good course of treatment, have healthy children, and then suffer from a relapse of the disease, when his children will again be syphilitic.

In skin affections where the vasomotor system is at fault, as in some forms of rosacea, urticaria and erythema, ichthyol given internally will generally be of service.

### ORTHOPAEDICS.

Earl D. McBride, M. D., Oklahoma City.

### SURVEY OF CRIPPLES IN NEW YORK CITY OCTOBER, 1920

Henry C. Wright, Director of Survey, under auspices of New York Committee on after-care of Infantile Paralysis cases.

The object of the report was to "ascertain the number of crippled in New York by different causes and the nature of care and treatment being given them with the emphasis on the causes which produce cripples."

"Some significant findings" were:

1. That there are about 36,000 cripples in New York City.
2. That of all cripples about 50% are under 16 years of age; that about 63% became crippled before reaching that age.
3. That nearly one half of the cases discovered by the field canvass were not being treated; that there are in the city of New York probably about 1000 cases of poliomyelitis, Pott's disease, and tuberculosis of the joints not yet diagnosed; that there are about 3700 cases with these diseases that have been diagnosed but have ceased to attend clinics; that over 50% of cripples are not known to any agency.
4. That very few cripples attend high school.
5. That there are enough operative beds and sufficient clinical facilities, but insufficient number of convalescent and custodial beds.

Many interesting charts have been formulated and some of the more interesting show the following facts: Out of 341 cases over 15 years of age only 59% are entirely self supporting; 28% wholly dependent, and 13% partially self-supporting.

A table comparing percentages of main causes of disability shows that under 16 years of age 6.4% are due to tuberculosis, 39.3% to rachitis, 27.3% to poliomyelitis, 5.9% to traumatic causes, and 12.1% to congenital causes. Over 16 years of age traumatic causes are in the majority being 42.5%.

Note: This report is of interest chiefly because what was found by this investigation is bound to be more or less true in other localities. A complete report may be obtained for \$1.00 postpaid by addressing the Director, Mr. Robert Stuart, at 69 Schermerhorn St. Brooklyn New York.

### THE JONES OPERATION FOR ANKYLOSIS OF SUBDELTOID BURSITIS

Wallace Blanchard, M. D., F. A. C. S., Chicago, Ill. (*The Journal of Orthopedic Surgery*, August, 1920, Vol. 2, No. 8.)

Subdeltoid bursitis is one of the most common and at the same time the most frequently unrecognized of the shoulder injuries. During the first month it is often difficult to make a diagnosis of bruising of the subdeltoid bursa, and supraspinatus tendon and the patient frequently passes out of the hands of the attending surgeon before calcareous degeneration and shoulder joint fixation develop.

The following case is given as a typical history: a factory man aged 42 years had a slight fall and caught his weight



on his hand. The pain that followed was severe, but the arm could be moved in all directions. There was no fracture found and factory surgeons put his arm up in fixation dressings for a month. But the patient still had pain and inability to use the arm. He was then declared a malingerer by the insurance Company and discontinued indemnity. Several months later he came to the author with strong resistance to motion beyond an arc of 15 degrees. Under anesthetic and following the method of General Sir Robert Jones, the patient was held upon his back so that the scapula rested securely upon the table. The assistant's fist was placed in the axilla and against the head of the humerus to prevent a possible downward dislocation. The arm was moved firmly into abduction and rotated inward and outward, then pushed backward to its normal limit. Then finally the arm was given forcibly its full radius of movement. The breaking of the adhesions sounded like the fracturing of bones. Two days later the man could reach as high above his head with one hand as with the other. Jones warns against half-hearted attempts to break up the adhesions and also against the danger of increasing the amount of cicatricial tissue by injudicious passive movement early in the disease. It may be done in some cases without anesthetic.

This forceful method should not be used except when the painful fixation is caused by a sterile deposit of lime salts and after a careful examination has been made to exclude active forms of painful disability of the arm.

#### GENERAL SURGERY.

M. E. Stout, M. D., Oklahoma City.

#### THE ACUTE ABDOMEN

John B. Deaver, Philadelphia,

(*Surgery Gynecology and Obstetrics*, January, 1920)

The author begins by stating that the acute abdomen calls for careful judgment and thoughtful consideration and states that it occupies too prominent a place in mortality statistics and further charges that this is often due to untimely and unsuited operation.

He says that the acute abdomen is usually due to antecedent chronic lesions and enumerates the chronic gall bladder, the gastric and duodenal ulcer, chronic pancreatitis, torsion of the pedicle of a floating spleen, perforating ulcer of the large bowel, or in the acute lower abdomen, chronic appendicitis, typhoid perforations, salpingitis, ovarian cyst becoming twisted on its pedicle, hernia of long standing, possibly incarcerated, all of which produce such definite symptoms to every one acquainted with surgical diseases of the abdomen, that it should have pointed the way to surgical relief. Unless we entertain the foolish belief that chronic ulcer, chronic gall bladder, chronic appendicitis, tubes, etc., can be cured by medicine, diet or visiting one of the famous springs.

He states that it is often impossible to make an exact anatomical diagnosis, but says that we should recognize an acute abdominal catastrophe and open the abdomen.

He calls attention to the fact that there are acute conditions of the abdomen which are not surgical and mentions acute dilatation of the stomach, gastro-enteritis, pneumonia and diaphragmatic pleurisy, and sounds a warning against mistaking them for surgical conditions, insisting that diagnosis is the essential factor and not treatment. He warns us against the use of morphin until the diagnosis is made and censures the doctors and the laity in emphatic terms for the use of purgatives in any acute abdominal condition.

He insists on early operations in cases that are seen early but states that in some of the late cases, especially those of the pelvis it is better to carry out the Fowler-Murphy-Ochsner treatment until they localize. He quotes Maurice Richards in saying that they are "too late for an early operation and too early for a late operation," stating that the time for operation refers to the

stage of the disease and not the time the patient is seen by the surgeon and, in concluding, he says that in this seemingly hackeneyed subject much that is important and life saving has not as yet been standardized.

#### CANCER OF THE UTERUS IN YOUNG WOMEN

George Gibson, Brooklyn, N. Y.

(*American Journal of Obstetrics and Gynecology*, December, 1920)

In beginning the writer states that it has been so long taught that cancer of the uterus occurs about the time of the menopause that unless one is alive to the fact that it can occur at any age, an early case in young woman may be overlooked because "the condition present was not considered."

He quotes Peterson's report of twenty-three cases of cancer of the cervix occurring in women under thirty in a series of five hundred cases and cites six occurring in a series of sixty-one of his own cases.

He states that cancer of the uterus is much more malignant when it occurs in the young and advises immediate operation, supplemented by radiation.

In conclusion, he says, first. Cancer of the cervix occurs with sufficient frequency in young women to make it imperative that the condition be kept in mind. Second. Epithelioma is the type generally found. Third. The growth is much more rapid than in older individuals and only when seen in the first three months can an operation be done. Fourth. The extension is especially rapid when the parametrium becomes involved and death follows comparatively soon.

#### RADIUM IN THE TREATMENT OF CARCINOMA OF THE CERVIX UTERI

Edward H. Risley, Boston

(*Annals of Surgery*, December, 1920)

The author states that we stand more or less at a parting of the ways in regard to the treatment—no longer of the inoperable cases—but also of those that are unquestionably recognized to be operable; that operation is not the only means of actually curing cancer in this region.

After dwelling upon the importance of early diagnosis of cancer and precancerous conditions, he divides his cases into three classes for treatment: First. The clearly surgical. Second. The borderline. Third. The clearly inoperable.

He advocates the radical operation in all clearly surgical cases, that is, where it is feasible to completely remove the entire growth and there is no systemic contra-indications to surgery; but in the borderline, and the inoperable cases and those where in general surgery is contra-indicated, he recommends the slow canter and radium or radium alone if the protruding mass is not great.

He cauterizes and cures the mass away, gives a heavy radium treatment and has the patient return every four weeks for further radiation until all signs of the disease disappear and then has them report every three to six months for observation for three years.

He states that he has found that procedure to be of great service in the inoperable cases, in many of which the diseased has all but been destroyed and certainly so delayed in its progress; that patients with pain, hemorrhage and foul discharge have been given complete relief for many months at a time and a miserable hopeless existence converted into a happy one, and states further that with proper handling and enough attention to detail that the inoperable case is one for whom much that is worth while can be done and closes by saying that radium has very definitely established its place in our armamentarium as an agent, which in the inoperable cases can accomplish such a praiseworthy and definite diminution and often almost complete cessation of distressing symptoms and that it must be looked upon as one of the greatest therapeutic advances of the age, especially when applied to carcinoma of the cervix.

### Editorial Notes—Personal and General

Dr. M. P. Willis has moved from Picher to Commerce.  
Dr. I. L. Cummins, Ada, is doing post-graduate work in Chicago.

Dr. G. W. Tilly has moved from Pryor to Locust Grove, Oklahoma.

Dr. M. D. Carnell, Okmulgee, has opened a maternity hospital in that city.

Dr. A. H. Culp and family, Beggs, have returned from a four months trip to California.

Dr. A. T. Dobson, Hohart, has recovered from a surgical operation undergone in Hohart in February.

Dr. H. C. Bailey, Sulphur, has returned from a visit for postgraduate work in New York and Rochester.

Dr. J. P. McRae, Coalgate, seriously ill following an operation for appendicitis in February, is reported to be recovering.

Dr. D. B. Ensor, Hopeton, suffered from a streptococcal sore throat in February and was confined for some time in the Alva hospital.

Oklahoma City physicians are perfecting an organization to finance and erect a physicians and surgeons building to cost \$150,000.

Dr. Leila E. Andrews, Oklahoma City, attended in Baltimore the American College of Physicians and the American Congress in Internal Medicine.

Dr. V. C. Tisdal, Elk City, announces the opening of his sanitarium April first. The building, modern in every respect, is said to have cost Dr. Tisdal \$75,000.00.

Dr. A. L. Blesh, Oklahoma City, and Miss Beatrice Rogers, of Sulphur, were married in Ardmore on January 22nd. They will make their home in Oklahoma City.

Wesley Hospital sustained its greatest excitement recently when a patient threw \$5,000.00 worth of radium down the clothes chute. On its recovery the excitement subsided.

Charles Leonard Brown, Geary, senior medical student of the Oklahoma University, on competitive examination, won the internship at the Peter Brent Bringham Hospital, Boston.

Dr. Lee Dorrah, Hammon, went to Arizona in February and recovered an automobile stolen from his home, Hammon, in September. The thief was also captured and returned to Oklahoma by trial.

McAlester meeting will be entirely housed from the registration desk to largest sections in the Baptist Church, according to announcement of Dr. L. S. Willour, Committeeman in charge of meeting places, etc.

Drs. John Lindsey, Elmore City, and N. H. Lindsey, Pauls Valley, brothers, recently had the unique experience of assisting in conferring the degree of Master Mason upon their four nephews, sons of their brother, W. M. Lindsey.

Frederick citizens, after many months of preliminary work, have completed the details for a combined City and County Hospital. Practically all of the present City Hall and a building near it used by Tillman County as a jail will be converted to hospital uses.

Dr. F. A. Howell, Okmulgee, is relating many anecdotes of his army days when he and Edwin Denby, Mr. Harding's new Secretary of War, were stationed together as lieutenants of the marine corps on duty at Paris, Island, South Carolina. Dr. Howell says that Mr. Denby is a big man, well fitted for the job.

Reverend Father C. R. Moulinier, President of the Catholic Hospital Association of the United States, and Dr. LeRoy Long, Dean of the Medical Department, Oklahoma University, addressed a citizens meeting at Okmulgee, February 23rd, in the interests of increased hospital facilities for Okmulgee.

Daily Oklahoman advocates state hospital for soldiers—and wants it built as “an annex to the University Hospital at Oklahoma City.” Ay coorse—as Mr. Dooley uster say—we’re for the state building a hospital, too—provided we can have it erected as an annex to one of the Enid hospitals. Keep the home fires burning, say we—also.—*Enid Events.*

Oklahoma cows get decidedly the best of it in the matter of state appropriations for control of tuberculosis. *The Oklahoman* editorially says that the Chief of Bureau, Human Tuberculosis, is allowed; salary \$2,000, contingent fund, \$1,000; the “Bovine” end gets, for like salaries, \$12,000, contingent fund \$55,250. Other comparisons only end as such always do, with the odious.

Dr. W. B. Pigg, Okmulgee, on election to the Presidency of his county society, delivered his “inaugural address,” the title being, “My True Friends Know My Faults and Say Nothing About Them.” Dr. W. H. Cooley, Okmulgee, read a paper on “When Tonsils Should Be Removed.” Dr. Ira W. Robertson, Henryetta, on “Tubal Pregnancy.” Dr. Harry E. Breese, Henryetta, was elected Secretary.

The Committees of Pittsburg County Society for the Annual Meeting of the Oklahoma State Medical Association in McAlester, May 17-19, 1921, are as follows: Finance, T. H. McCarley; Buildings, L. S. Willour; Program, C. F. Loy; Badges, R. K. Pemberton; Entertainment, W. C. Wait; Reception, Echols and Membership; Exhibits, J. C. Johnston; Clinics, F. L. Watson.

Tulsa County Medical Society, February 14, upon motion of Dr. Horace T. Price, unanimously adopted a resolution advising Dr. Lewis, Commissioner of Health, that much of the work in keeping food supplies and eating places in Tulsa performed by activities of Mrs. Sturgeon, was being hampered and nullified by opposition of those affected by clean-up and similar orders. The Society wholly endorsed the work of Mrs. Sturgeon, suggesting she be given more powers if necessary.

Creek County Medical Society met at Sapulpa March 2nd, holding one of their largest meetings. Speakers were heard on community service work. Dr. W. P. Longmire, Sapulpa, read a paper on “Pelvic Inflammations,” discussed by Dr. M. A. Houser, Tulsa; Dr. W. P. Robinson, Sapulpa, on “The Endocrines,” discussed by Dr. C. D. Blachly, Drumright. Dr. Orange W. Starr, Drumright, by permission of the society announced that Creek County's representative, Admire, had supported both the Chiropractic and Osteopathic bills, and that they were detrimental to the public.

Dr. R. W. Dunlap, Secretary, Tulsa County Society, issues in his characteristic manner the usual County Society Bulletin for meeting of March 14, offering as attractions “Prophylactic Obstetrics” by Dr. J. Winter Brown and “Osteomyelitis” by Dr. Ralph V. Smith. Dr. Dunlap used the remainder of the sheet to explain the illegible emblems (Home Brewed by his own artistic pen) as the shamrock and pipe, a kindly recognition of the nearness to St. Patrick's Day, then concluding with some very pertinent philosophy as the best policy our profession should adhere to in the future. Noting the immense, apparently wholly unappreciated, services given the public through the years of the doctors' life, free clinics, philanthropies, etc., he, certainly with force and logic, suggests the thought inspired by the Irish Holiday and moves that hereafter ours should be substantially the emblem of the Sinn Fein, “For Ourselves Alone.” This bulletin was immediately followed by another advising the visit of General Goethals, the engineering genius who executed the great task of building the Panama Canal, who went to Tulsa to inspect and advise that City as to its water supply problems, a part of the trip including a visit and inspection of the Spavinaw water shed and supply, over which very great, up to now, useless controversy has raged. It is to be hoped that the matter will be definitely and authoritatively disposed of by General Goethals.



## DOCTOR JAMES MILTON MCCOMAS

Dr. J. M. McComas, Elk City, died from uremia February 22nd. Dr. McComas was born in Danville, Kentucky, February 29, 1844. His funeral was held under the auspices of the Masonic Fraternity, of which he was a member. He is survived by a wife and two sons, Dr. Arthur McComas, Sturgeon, Missouri, and E. G. McComas, Sayre, Oklahoma. Dr. McComas was for many years active in the affairs of the Oklahoma State Medical Association, serving as one of the Councillors for several years, only retiring from his active participation on account of advanced age and physical disability.

## DOCTOR CHARLES HOWARD DAVIS

Dr. C. Howard Davis, formerly a Checotah citizen and a member of the State Medical Association, died at his home, Casa Grande, Arizona, on February 18th. Dr. Davis was 52 years old at the time of death and represented his county in the Arizona Legislature. His death will be regretted by a host of friends and relatives in Oklahoma. He is survived by his wife, Mrs. Anna Scott Davis, and by a nephew in the Oklahoma Medical profession, Dr. Howell A. Scott, Muskogee.

Base Hospital 25, Houston, is maintaining its reputation as a place unit to care for Oklahoma soldiers. Tulsa Post American Legion recently received a report from a visitor who witnessed general bad conditions present, the report stating that the men did not receive the proper care, in the estimation of the investigator, that the food is bad, dishes chipped, metal cups rusty, one inmate from Tulsa advising that he had not been examined by a physician for about six weeks, another Tulsa soldier, inmate of the hospital for some time with a broken bone, stating nothing whatever had been done for him. From Haskell County comes a report of similar indifference. The inmate with the necrotic bone stated that during his three weeks stay, his wound was not dressed at all, receiving only one superficial examination. He was refused his discharge and promptly bought a ticket back home.

**Factors Determining Surgeon's Fees** were declared by Dr. Fred S. Clinton, Tulsa, in a hearing before the Industrial Commission, February, 9th to be the following: "Mental, moral and material equipment to qualify for the particular case; the experience, judgment, skill and proficiency required and possessed; the character and amount of service rendered; the amount of responsibility assumed and exacted; the value of the service to the patient and employer; the reputation of the surgeon; the custom in the locality among the men doing the same class of work; the number and character of operations and amount of after care, all have to do with determining the fees charged a pay patient, although the preservation of life, function and form in individuals seriously injured can hardly be tabulated or itemized satisfactorily because life, and health and happiness cannot be measured in money."

## MEETING OF THE AMERICAN COLLEGE OF SURGEONS, OKLAHOMA SECTION

The Oklahoma section of the American College of Surgeons held its first meeting at Oklahoma City, February 21 and 22. It was attended by Fellows from Texas, Kansas and Oklahoma.

Clinics were held at St. Anthony's, University, Wesley, and Baptist Hospitals during the forenoons of both days. They were well attended and much appreciated.

The Section on Hospital Standardization was held Monday afternoon. The program was of unusual interest, and impressed all with the advantages to be derived by cooperation for the attainment of the plan outlined.

The public meeting held at Methodist Episcopal Church was well attended and every one present evinced great interest in the subjects discussed. Although it dealt with the cancer problem which is so important to the public at this time, no notice was given in the *Daily Oklahoman* of this meeting in which this important public health problem was discussed.

The Oklahoma Fellows feel deeply grateful to the men who came and helped to make this first meeting such a success.

Following was the the program of the public meeting at 7:30 p. m.

Dr. Horace Reed, Chairman, Oklahoma Executive Committee, Presiding.

Address of Welcome—Dr. Stratton D. Brooks, President Oklahoma State University.

"The American College of Surgeons"—Harold M. Stephens.

"How the Public Can Assist in Reducing the Mortality of Cancer."—Dr. C. Jeff Miller, New Orleans, La.

"Standardization of Hospitals."—Rev. C. B. Moulinier, S. J., Milwaukee, Wis.

"Why the Church Believes in Medical Education of the Laity."—Rev. I. Frank Roach and Rev. E. D. Salkeld, of Oklahoma City.

## PUBLIC HEALTH NURSES' INSTITUTE IN OKLAHOMA

A two day public health nurses' institute attended by about forty public health nurses from all parts of the state was held in Oklahoma City, February 18 and 19, under the direction of the Oklahoma Public Health Association. These gatherings are held three or four times each year for public health nurses employed by all organizations, and have been found eminently successful, not only in imparting much useful knowledge and information, but more especially by giving the nurses a broader outlook on the field of public health, encouraging those who are laboring under difficulties in pioneer communities and giving the nurses an opportunity to meet each other and learn about the work going on outside their respective communities.

The institute consisted of lectures, round table discussions and demonstrations. Following is an outline of the program: "Development of Public Health Work in Oklahoma," Jules Schevitz, General Secretary, Oklahoma Public Health Association; "Coordination of Public Health Nursing in Oklahoma City," Miss Margaret Howard, Superintendent Oklahoma City Public Health Nursing Association; "Health Program Before the Eighth Legislature," Dr. A. R. Lewis, State Health Commissioner; "Consultant Tuberculosis Service," Dr. L. J. Moorman, President Oklahoma City Anti-Tuberculosis Society; and "Health Crusade Tournament," Miss Henriette Hart, Crusader Executive, Oklahoma Public Health Association.

A school nursing demonstration was held under the direction of Miss Anna Stanley, school nursing supervisor of the Southwestern Division American Red Cross, and the nurses' round table was led by Miss Rosalind Mackay, state director of public health nurses. The meeting was featured by an inspection of the open air school and by an exhibition of health films, also a plea for recruiting of student nurses by Miss Ethel G. Pinder, director of division of nursing, Southwestern Division American Red



Cross. Mrs. Bessie McColgin, only woman member of the House of Representatives, delivered an excellent address on women's and children's legislation.

## MISCELLANEOUS

### THE MEAD JOHNSON POLICY

Mead's Dextro-Maltose is advertised only to the medical profession. No feeding directions accompany trade packages. Information regarding its use reaches the mother only by written instructions from her doctor on his own private prescription blank.

### NEW ABBOTT PRICE LIST READY

Owing to unsettled conditions in the drug markets during the world war, new catalogs and price lists in this field were rather few and far between. The new list now ready, of Abbott pharmaceuticals and medicinal chemicals, will therefore, be welcomed by the profession as it contains many of the newer council-passed items unobtainable prior to the war, except from foreign sources, but now made available through scientific research by an American firm. A copy will be sent free on application to The Abbott Laboratories of Chicago.

### THE KERNELS OF WHEAT

The busy physician cannot read everything that comes to his desk. The varied assortment of pamphlets, circulars and other printed matter that comprise a considerable portion of his daily mail often receives but scant consideration unless there be some conspicuous feature in it to fix his attention. But even chaff may contain kernels of wheat—a thought suggested by the receipt of an exceedingly attractive little pamphlet just issued by Parke, Davis & Co., bearing the superscription "Adrenalin in Medicine." Here is something which even the busy practitioner can read with pleasure and profit. It sets forth in the briefest possible manner all that is known respecting the properties and therapeutic uses of Adrenalin. By the bye, it is a fact not generally appreciated that the vast literature we possess to-day on the functions and medical adaptations of the suprarenal body hinges almost absolutely upon the study of Adrenalin by many laboratory and clinical workers in many countries.

We urgently advise our readers to send for a copy of the booklet for immediate perusal and future reference; a descriptive announcement will be found in the advertising section. Parke, Davis & Co., will cheerfully honor all requests for the booklet from medical men.

### WESTERN ELECTROTHERAPEUTIC ASSOCIATION.

The third annual meeting of this association will be held at the Little Theatre, Kansas City, Missouri, under the presidency of Dr. B. B. Grover, of Colorado Springs, April 21-22. The annual dinner will be given at the City Club on Thursday evening, and a number of distinguished speakers will be present, including: Surgeon-General Hugh S. Cumming, Dr. A. J. Pacini, Chief of the X-Ray Department U. S. Public Health Service; Dr. H. Bowing, Mayo clinic; Dr. A. F. Tyler, Omaha; Dr. Wm. Benham Snow, New York City; Dr. Frederick H. Morse, Boston; Dr. Curran Pope, Louisville; Dr. T. Howard Plank, Chicago; Dr. Omar T. Cruikshank, Pittsburg; Dr. Byron Sprague Price, President American Electrotherapeutic Association, and others.

A three days session of the Western School of Electro-Therapy will precede the above meeting, beginning April 18th.

Clinics and demonstrations will be held every afternoon. An elaborate commercial exhibit, comprising all the leading manufacturers of apparatus is being arranged, and will prove of great interest to visitors.

For information or programme address the secretary, Dr. Charles Wood Fassett, 115 East 31st St., Kansas City, Mo. 2-21-2

### DECLINE OF LABOR EFFICIENCY.

Samuel M. Felton in Recent Address.

Before Government control was adopted the employees in many railway shops were paid on a piece-work basis. During Government control all piece-work on railways was abolished. The result has been a serious decline in the efficiency of certain classes of employees. The Railroad Administration entered into national agreements with many classes of employees which have imposed burdensome restrictions and have greatly increased expenses. The Railroad Administration also established at Washington a number of boards of adjustment to which employees of all the railways could appeal discipline and grievance cases from the individual managements. These boards rendered numerous decisions which greatly increased expenses, and we are now confronted with demands from the labor unions for the establishment of similar boards under private operation. The railways cannot restore the efficiency and economy of operation which formerly prevailed unless they can secure efficient work from their employees. The employees are today paid the highest wages in history and are working on an eight-hour basis, and it is their duty, not merely to the companies, but to the public, to give one good hour's work for every hour's pay that they receive. If the railway managements are opposed to certain labor policies adopted under Government control it is because they know that these policies have resulted in a decline in the efficiency of labor. *St. Louis Post-Dispatch.*

### CLINICAL NOTES.

The J. A. M. A. for November 20, 1920, quotes from *Schweizerisch Medizinisch Wochenschrift*, Basel, as follows:

Glaus reports that chloral has proved in several years experience a very useful means to combat insomnia in patients with heart or vascular disease, especially with high blood pressure. In such cases the ordinary sedatives—outside of opium—often fail to relieve. The sedative action of chloral is supplemented by its vasodilating and its diuretic action. Some of the patients have been taking it for years. The usual dose is between 1 and 2.5 gm. By the mouth, it is given dissolved in 20 gm. water with 10 gm. syrup of orange peel. When given over long periods it is preferred to give it in a small water or starch enema (30 gm.).

Ten case reports are given from Jaquet's private clinic to demonstrate the advantages of this treatment under medical supervision. The output of urine in some cases which had been under 700 c.c. under digitalis and other drugs, ran up to 1,400 or 1,600 under the chloral. Even when the patients did not sleep sound all night under these small doses, they were tranquil and free from dyspnea. Moderate degrees of cardiac insufficiency with signs of stasis in the lungs and swelling of the liver do not deter from this treatment, but severe degrees of cardiac insufficiency contraindicate it, and it is to the exclusion of such cases that Glaus ascribes the lack of unfavorable experiences with this treatment.

In my clinical work at the Indianapolis hospital, I also used in some cases an elixir of paraldehyde with no untoward effects. At times a heart muscle would quiet when some form of opium had failed. I think it is always right, however, to use caution in the use of chloral hydrate. —*Earp-Indianapolis Med. Jour.*, Jan. 21.

### Council on Pharmacy and Chemistry, A. M. A.

The following articles produced by advertisers in this JOURNAL have been accepted for inclusion with New and Nonofficial Remedies by the Council on Pharmacy and Chemistry.

### PROPAGANDA FOR REFORM

**Glover's Cancer Serum.** The Toronto Academy of Medicine reports unfavorably on the cancer cure put out

by J. Glover of Toronto, Canada. The report of the special committee appointed by the academy may be summed up by the paragraph which reads: "The data which your committee has been able to obtain have not convinced it that the results of treatment obtained by the use of Doctor Glover's Serum are better than those obtained by similar methods introduced by others and which have ultimately disappointed the hopes entertained of them." The committee reported that it was unable to obtain any evidence to substantiate the experimental claims of Doctor Glover, as he had refused to permit members of the committee to visit his laboratory. The committee also reported that it found no evidence for the clinical claims made by Doctor Glover (Jour. A. M. A., February 5, 1921, p. 396).

**The William F. Koch Cancer Remedy.** In 1918 William F. Koch graduated from the Detroit College of Medicine and Surgery. Less than a year after his graduation Doctor Koch declared that he had "developed a real specific cure for cancer." In the Detroit Medical Journal for July, 1919, there appeared a brief article by William F. Koch entitled "A New and Successful Treatment and Diagnosis of Cancer." A more extensive article was published in the New York Medical Journal of October 30, 1920. As a result of the publicity given the Koch treatment, the Wayne County (Detroit) Medical Society appointed a committee to investigate the matter. The committee reported that Doctor Koch had submitted no proof that his injections had any particular merit and concluded that the study was entirely experimental and improperly supervised. Evidently the most that can be said for this alleged cure for cancer is that the claims made for it have not been supported by independent investigators (Jour. A. M. A., Feb. 12, 1921, p. 466).

**Metal Dermatitis.** Workers in photographic establishments, especially those engaged in the developing process, are exposed to a number of industrial poisons. In an examination of forty studios in Chicago there were found thirty-one cases of poisoning by metal (the trade name for mono-methyl-para-amido metacresol sulphate), characterized by an erythematous rash of the hands and arms, occasionally involving other parts of the body and giving rise to ulcers. Various methods for the prevention of this dermatitis and for its treatment are published (Jour. A. M. A., Feb. 19, 1921, p. 540).

**Iron Arsenite.** Ferric arsenite (iron arsenite) rendered water soluble by means of ammonium citrate is known as ferric arsenite soluble. The Council on Pharmacy and Chemistry in 1912 reported that the preparation was irrational and unscientific because "one cannot, in administering this drug, give a useful dose of iron without giving too much arsenic and, vice versa, one cannot give a safe dose of arsenic without giving too little iron." (Jour. A. M. A., Feb. 19, 1921, p. 540.)

**The William F. Koch Cancer Remedy.** A physician writes about a case treated by Doctor Koch and submits a letter written by Doctor Koch a week before the woman died of generalized carcinomatosis. The two letters bring out the optimism engendered in the husband of the poor cancer patient by the widely vaunted treatment of Koch. Herein lies the most pernicious feature connected with the exploitation of alleged cures for cancer, tuberculosis, etc. All of such remedies, whether fraudulent or merely worthless, produce a profound and temporary change in the patient's condition. It is this that tends to warp the judgment, not only of the layman but also of the physician (Jour. A. M. A., Feb. 19, 1921, p. 537).

**Borotetramin ("Boro") not admitted to N. N. R.** Borotetramin and Boro are names applied by the Takamine Laboratories to hexamethylenamin diborate. It is a molecular combination of hexamethylenamin and boric acid which is readily split into its components. The borates of hexamethylenamin have been known for some time, and the triborate has been used in medicine as "Boroverin". Since Borotetramin must split into its components before it can act, it presents no distinct

advantage over a simple mixture of hexamethylenamin and boric acid. For this reason the Council on Pharmacy and Chemistry reports that Borotetramin is a superfluous and, therefore, useless article and hence not eligible for inclusion in New and Nonofficial Remedies (Jour. A. M. A., Feb. 19, 1921, p. 538).

**Medicinal Use of Whisky.** In the twenty-four states of the union in which permits for the prescribing of whisky may be issued, there are 112,238 practicing physicians. Of these only 33,379 (29 per cent.) have taken out permits. Evidently the remaining 71 per cent. do not regard whisky as of enough value in the practice of medicine to go to the trouble of taking out a permit (Jour. A. M. A., Feb. 19, 1921, p. 524).

**Sodium Cacodylate, Arrhenol and Mon-Arsone.** At least three arsenicals not of the arsphenamine type have in recent years been the subject of some exploitation for use in the treatment of syphilis, namely, sodium cacodylate, Arrhenol (the sodium salt of methyl arsenic acid) and Mon-Arsone (the sodium salt of ethyl arsenic acid). As to the first two, it was shown several years ago that neither had any action on trypanosomiasis or spirochete infection. The inefficacy of sodium cacodylate in human syphilis has been demonstrated clinically. Animal experiments made in the United States Hygienic Laboratory have demonstrated that Mon-Arsone is devoid of any practical trypanocidal action. Whereas the "therapeutic ratio (the ratio of the Minimal effective dose to the lethal dose) was 17 and that of neoarsphenamine 28, the therapeutic ratio of Mon-Arsone was found to be about 1, that is, it was effective therapeutically only in approximately fatal doses. The high arsenic content of a compound and a low toxicity and a number of cases of apparent clinical improvement does not indicate that a drug has real value in the treatment of syphilis. Many drugs cause temporary improvement in syphilis, but so far only those arsenicals related to arsphenamine have proved of real value and comparatively safe (Jour. A. M. A., Feb. 26, 1921, p. 595).

## NEW BOOKS

Under this heading books received by THE JOURNAL will be acknowledged. Publishers are advised that this shall constitute return for such publication as they may submit. Obviously all publications sent us cannot be given space for review, but from time to time books received, of possible interest to Oklahoma physicians, will be reviewed.

### THE ROENTGEN DIAGNOSIS OF DISEASES OF THE ALIMENTARY CANAL.

By Russell D. Carman, M. D., Head of Section of Roentgenology in the Division of Medicine, Mayo Clinic, and Professor of Roentgenology (Mayo Foundation), Graduate School of Medicine, University of Minnesota. Second Edition Thoroughly Revised. Octavo of 676 pages with 626 original illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth \$8.50 net.

In this second volume the author has brought up to date all of the old chapters and with the addition of several others has greatly increased the practical value of the book. One chapter added on the hour-glass type of stomach is especially interesting and is well illustrated. One other is a chronological abstract of the published work on pneumoperitoneal diagnosis of abdominal lesions.

The volume is well written both from an anatomical as well as from a radiographic standpoint. Dr. Carman has well taken care of a large and important field of radiography in a short, concise, well written and well illustrated book. The illustrations are excellent; the form very good, because he takes up each anatomical division separate and in detail describes all the anatomical and pathological conditions one is apt to find in the alimentary canal. About two-thirds of the work has been devoted to the stomach. Dr. Carman has had a wonderful







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### INTERPRETATION OF BLADDER SYMPTOMS IN THE FEMALE\*

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OKLAHOMA CITY, OKLAHOMA

It was not with an idea of offering anything new or original that I accepted the privilege of reading this paper before this association, but rather because of the conviction that the importance of the subject justified the emphasis of some of the more salient points even at the risk of the repetition of certain recognized and well known facts.

True it seldom happens nowadays that a well trained urologist fails to attach the proper significance to bladder symptoms, but it is none the less true that, to the general practitioner and even to the man specializing along other lines, bladder symptoms still too often mean cystitis, and nothing more.

As a result of this misconception, it not infrequently happens that destructive lesions, which often lie behind what seems to be a trivial local condition, are allowed to progress to the point where important organs, or life itself is sacrificed.

When I speak of bladder symptoms, I have in mind particularly the symptoms of bladder irritation, i. e., frequency and dysuria.

If we will bear in mind the possibilities in each case of what appears to be a simple cystitis, we will often be rewarded by the discovery of a serious lesion in its incipency.

Every case deserves the most careful handling. First a thorough history should be carefully elicited. This alone will frequently give us the proper clue.

Of what duration are the symptoms, and are they more severe or present only at the menstrual periods? Were the symptoms preceded by or associated with a discharge? Has the patient borne children or had abortions? Has there at any time been pain in either loin with or without radiation toward the bladder? Has the pain been sharp or dull and associated with chills and fever? Has the urine ever been bloody? Has there been any gastrointestinal symptoms? Has the patient experienced any loss in weight or strength? Is the

dysuria most marked before, during, or after the act? Is there any incontinence (partial or total), and is the stream ever checked suddenly during the act?

Is there any pain in the bladder region independent of the urinary act, and if so is it more pronounced on jarring? Is there inability to empty the bladder completely, and does change in position bring on a desire to urinate soon after the bladder has apparently been emptied? Has the patient entered the menopause, and if so has there been any spotting of blood?

Is there anything in the history suggestive of syphilis? The taking of the history should be followed by a complete physical examination. This should include the taking and recording of the temperature, pulse, and blood pressure. The skin and mucous membranes should be inspected for secondaries. The reflexes should be tested, and the glandular system palpated. Then the chest and abdomen should receive a thorough going over, and careful search should be made for infected foci as the possible source of our trouble. The renal regions should then be subjected to careful palpation for tumor, tenderness, and movable kidney. This is often best done with the patient in the sitting or semi-reclining position.

The Murphy fist percussion should be employed to test the presence or absence of tension within the kidney capsule. It is well to remember in this connection a point mentioned by Murphy that prolonged palpation of a healthy kidney is sometimes followed by the appearance of microscopic blood in the urine.

A specimen of urine should, therefore, be collected before the examination is made, and prior to any urethral instrumentation in order to avoid the confusion likely to arise from the presence of traumatic blood. The examination should not be considered complete without a visual inspection of the vulva and meatus urinarius for signs of inflammation, discharge, caruncle, etc., and a pelvic examination should never be neglected. This may reveal a suspicious cervix which bleeds readily to touch, a prolapsed or retroverted of subinvolted uterus, a parametrial or tubal involvement or tumor. A stone in the bladder or vesical end of the

\*Read in Section on Genito-Urinary, Skin Diseases and Radiology, Annual Meeting, Oklahoma City, May, 1921.

ureter may also be palpated through the vagina.

The parous woman should be examined in the standing posture for signs of relaxation of the anterior vaginal wall.

If, after carrying out the painstaking investigation above outlined, we have disclosed nothing of a serious nature either within or without the bladder, then and then only are we justified in making a tentative diagnosis of simple cystitis, and putting the patient on appropriate treatment with the assurance of relief in ten days to two weeks considering our tentative diagnosis is correct.

If after that time there is no improvement, or only temporary improvement, we should realize that the cystitis is secondary to some other condition, and at once institute further investigation.

Cystoscopy is the next logical procedure. It may show us an infected diverticulum which has been reinfecting the bladder as fast as we get it cleared up. The solitary ulcer or the secondary or tertiary lesions of syphilis may be found, or a group of tubercles or ulcers about an ureteral orifice may give us the clue to renal tuberculosis above. A stone or papilloma may appear as the contributing factor or a patch of bullous edema may disclose the existence of an inflammatory mass in the pelvis.

If pus is present in the urine, the ureter catheter will prove beyond all doubt whether or not the pus has its source above the bladder, and whether one or both kidneys are involved, and make possible the collection of separated urines for analysis, functional tests and guinea pig inoculation.

The passage or withdrawal of the catheter may locate a ureteral stricture which may be the cause of our patient's trouble.

Finally, the roentgenogram with shadow catheters in situ, and the uretero-pyelogram are invaluable diagnostic aids in cases of kidney and ureteral stone, and conditions which cause dilatation or distortion of the ureter or pelvis. Among these may be mentioned ureter stricture, infections of the kidney and ureter, neoplasm, and nephroptosis.

In short there is nothing diagnostic about the ordinary bladder symptoms. They are simply indicative of bladder irritation, and in the vast majority of instances have an extra-vesical cause.

There are, however, certain variations in bladder symptoms which are of value in differential diagnosis. For example, a chronic cystitis of extreme severity is suggestive of tuberculosis. This suggestion is strengthened if the urine is acid and contains microscopic blood, or pus which is sterile to culture. The

finding of the tubercle bacillus (and this is possible in about 80% of cases) makes the diagnosis certain. The finding of other organisms on culture does not rule out tuberculosis, for there may be a mixed infection.

Other infections associated with an acid urine are those due to the colon and typhoid bacilli and the gonococcus, while the staphylococcus, streptococcus and proteus group are found in alkaline urine.

The term, "irritable bladder," is often applied to the condition characterized by symptoms of bladder irritation with a sterile urine which is free from pus, and the case dismissed with a prescription for some urinary sedative.

But such a diagnosis should always be guarded. Careful study will often show that the symptoms are due to some pelvic condition which from pressure causes an interference with the bladder circulation; or the cause may lie in some dietetic error, or a concentrated urine.

When dealing with the woman patient, the fact should not be lost sight of that ascending bladder infections are far more frequent than in men, because of the short urethra, and for the same reason kidney infections are more frequent.

Finally, I wish to repeat that the only safe way to approach a case of cystitis, which has resisted treatment, is with the idea that a contributing factor is present until its absence is proven by thorough study and the employment of all the available diagnostic aids; and this stand should be taken for two reasons—first, because cystitis is usually the expression of some condition, either intra- or extra-vesical, which is far more dangerous than the cystitis itself, and second, because the treatment of a cystitis without removal of the accessory cause is without avail, while removal of the accessory factor usually makes treatment of the cystitis unnecessary.

308 Patterson Bldg.

### Discussion

*Dr. J. H. Hays*, Enid: Mr. Chairman. There are two things in this paper that I would specially like to emphasize. The history and medical examination of the patient. Those points the doctor brought out in his most excellent paper. The physician should take the history, make the physical examination before his mind is made up—make no diagnosis before he takes the history and makes the physical examination. A careful physical examination in itself is probably the most important thing. I would also add to that the microscopic findings.

Of course, the Doctor has given you to understand that in the first place is the question of

frequent and painful urination. The first point that I would take into consideration when the patient came in after his statement and the physical examination, would be a specimen of the urine. Does the urine contain pus, or not? If the urine contains pus, you are pretty sure that there is some trouble somewhere in the urinary tract, either between the point of the cortex of the kidney; that is, provided the patient has not been probed before she passes the urine. If the urine does not contain pus, I would not be prepared to say that there was not any trouble in the urinary tract, but I would suspect that the trouble was outside of the urinary tract. I think all of you will agree who read the cystoscope that there are many cases of cystitis that are producing painful urination caused as the doctor mentioned which will not be cured until the accessory cause is cured. The question of treatment, the doctor never went into.

If the trouble is outside of the urinary tract, and if the patient has not reached the period of menopause, I think you will find that eighty per cent of those cases, probably a higher percentage, will be found somewhere in the pelvic regions outside of the bladder. The most frequent thing that I have found outside of the bladder—if the woman has borne a child, the most frequent cause I have found has been either the prolapse of the bladder or the prolapse of the posterior portion of the urethra that is due to laceration. I presume everyone of you can recall many cases of this type; that is, cases in which there is no pus in the urine, in which upon inspection of the internal genitals you will see no indications of a prolapsus, but upon palpation with the finger in the anterior portion of the vagina you will see that there is a sliding down of the urethra. If you will take the trouble to pass a soft catheter, you will find that there is a sagging of the urethra, and if you will make a microscopic examination of this urethra, you will find that it is either urethral papilloma or a chronic inflammatory condition of the urethra. You will find upon milking this urethra that you will probably milk away a small amount of urine, and maybe when the urine is clear you will also find pus.

Of course, the next thing that has attracted my attention has been displacements of the tube and involution of the urine. Especially has my attention been called by the doctor to bullous edema. That subject has been mentioned in two papers here today. I don't know how many of you have observed cases of bullous edema. I have seen a number of cases in the last year that have attracted my attention, and I have noticed that in practically every case I would find either a subinvolved uterus, or a fibroid of the uterus, or a retrover-

sion of the uterus—in all the cases that I have seen, I think. I know it is a form of bladder disease that I have overlooked in the past, and I think it has been overlooked by a great many. In cases of infection of the bladder, the most frequent cause that I have found (that is, in cases outside of simple cystitis, which the doctor has been discussing today) has been pyelitis—I mean by that, an infection where there has been pus. I think, as I have tried to emphasize a number of times, that there are more cases of pyelitis overlooked than any other disease except skin disease. Pyelitis is an unusually common disease. It is a disease that may exist for years, contracted in childhood and becoming acute in manhood or in old age. I know that everyone of you that is connected with the hospital see many cases that when they come to the hospital for operation for some other disease, develop a temperature, and you find pyelitis, simply proving that pyelitis is a chronic disease and that it is not diagnosed until it becomes acute, secondary to some other disorder.

All that I could add in addition to that is that it is a most excellent paper and the points about the history and the examination of the case are as good points as I ever heard.

*Dr. W. J. Wallace, Oklahoma City:* Mr. Chairman. In making a diagnosis of the bladder conditions as outlined by Dr. Mraz, a complete physical examination is necessary. And one other thing in the general system that has been covered, as a routine practice, begin first with the urethra. Many of the cases in the urethra carrying in it the characteristic evidences of cystitis are higher up. That is quite common. We find it in old ladies; we find it in young; we find it in people that have had gonorrheal conditions. In old ladies and young we find a cystitis—a cysto-cell which is due to a condition in the urine.

We have a condition of the uterus and the tissues and various things that is caused by the frequency of urination and is not a cystitis but a condition of the urine that was overlooked—that has been treated so often with various medicines without touching a cysto-urethroscope, the instrument to be used in these cases. The cystoscope does not give us any light on that on account of the fact that we are unable to see through the urinary tract, but with the cysto-urethroscope and with a continuous flow of water through this tract, we can visualize the entire tract and thereby make that location.

Now, cystitis has been the great principal, predisposing, and active cause of pyelitis. In the active cases the urinations are frequent and painful and also pus and blood are found in the urine. So we can look for these three



things and will practically always make out something in the urine with the cystoscope and the cysto-urethroscope.

Pyelitis is very frequently diagnosed as cystitis. One case that I will refer to which was suffering with cystitis wanted me to make an examination. I took the history and made a cystoscope examination. I found a normal bladder, but in one of the urinary orifices we found a zone of slight congestion—a little bulging and inversion of the urine from that. Otherwise we found a normal bladder. In that case we have a reflex symptom. It is a reflex from the pelvis and the kidney into the bladder, which causes this frequency and irritable urination which I speak of. Cystitis and pyelitis are very common. I think that pyelitis can begin in early childhood and go on from time to time with its characteristic exacerbations and then later develop into pyelo-nephritis with some destructive condition of the urine. And pyelitis should be looked for following all of these various infectious diseases, especially the "flu" and other characters of diseases which we have been having in recent years, and I try to follow them up if a case comes in with any irritation of the bladder whatever—to make a careful painstaking diagnosis and a definitely correct diagnosis of the urine, especially following this type of disease.

I wish to compliment Dr. Mraz on his paper.

*Dr. J. H. Hays, Enid:* There is one point the doctor mentions that I have tried out this this past year quite extensively. It is that many of these cases were due to a stricture of the urethra, allowing diagnosis as stricture. Have you a stricture, or have you an obstruction of the urine? I don't know what the experience of other cystoscopies have been, but I have found a great many cases in men where I have been unable to pass the catheter up the ureter when it proved to be a perfectly normal urethra. The curvature has been such that I was unable to pass the catheter. Of course, we think right away that this patient has either got a stricture or a stone, and so, you know when you find a lot of these cases you begin to think that there is something the matter with yourself. One usually can pass the catheter up far enough to get beyond the opening even if the cavity happens to open to one side. So, in the past year to prove to myself whether I had an obstruction or whether I had a stricture, or whether there was nothing the matter, I take this procedure: I take and place in the operating cystoscope, using a number ten catheter, the largest that I have; pass it into the urethra as far as I can, usually beyond the opening, and then inject through this cavity a solution of chlorin-nitrate. Of course, I am careful not to inject enough

chlorin to produce tensions in the ureter. If there is a stricture, I dilate or remove the stricture just enough to partially fill the pelvis of the kidney. After filling the catheter, I have a pyelogram taken, and in that way I can demonstrate the number of strictures and can demonstrate to myself how few obstructions we have. Really it is surprising to me the number of strictures that we find in women; strictures that must be due to a prolapsus of the pelvic formation.

*Dr. J. Hoy Sanford, Muskogee:* I would just like to say a few words in regard to some cases in which you are unable to pass the ureter-catheter, with apparently no pathological symptoms present. It has been my experience that those cases have an angulation of the urethra—have a urethra ovular junction, and if you are careful and get your cystoscope just at the proper angle, you will overcome the ovulation and pass it without any difficulty. I think it depends largely where you locate your stricture or obstruction in overcoming the ovulation by putting your scope at the proper angle.

*Dr. Mraz, closing:* Gentlemen, I wish to thank the gentlemen for their discussion. I know, to me, it has been a very instructive one. Dr. Hays' point that the absence of pus in the urine does not necessarily exclude the possibility of infection along the urinary tract, I think is a very good one, for we know that there are many cases of pyelitis that are intermittent. So, I think that it is plain enough that one negative urinalysis should not be taken as conclusive, but should be followed by other urinalysis in an attempt to catch it at some time when it does contain pus.

So far as the ureteral strictures are concerned and the passing of catheters through the ureters, my experience has been somewhat like Dr. Sanford's. I have catheterized cases where my catheter would block and then getting it into a little different angle it would pass up, or possibly I would distend the bladder a little more with the fluid, or allow some of the fluid to escape from the bladder and then attempt it in that way. But there are some cases, I admit, that I experience where I can't pass the ureter catheter on up, and still apparently there are no pathological conditions present. I also use the method described by Dr. Hays of injections in the ureter, in these cases, and using a large calibre ureter catheter, entirely blocking the urethra to prevent the back flow. Then inject the shadow producing fluid and the picture will show the stricture, when present, in a large percentage of cases. This will be indicated by the dilated ureter above and by the constriction at the site of the stricture.

## ETIOLOGY, DIAGNOSIS AND SIGNIFICANCE OF HEMATURIA OF THE GENITO-URINARY TRACT.\*

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Hematuria of the genito-urinary tract is of very frequent occurrence, and results from many and varied conditions. Unfortunately it is lightly interpreted by the laity and a majority of physicians.

The purpose of this paper is not to quote statistics, but to urge the necessity for immediate examination and diagnosis when the first symptom, bloody urine, is discovered.

Hematuria is of grave significance and is due to some serious pathology. It is often difficult, and at times impossible, to determine the exact cause of the pathological changes from which it is derived, but with care and patience we can in all cases locate the real origin.

### Etiology

Hematuria, according to the location of the bleeding, may be classified into: *first*, urethral or prostatic urethral; *second*, vesical; *third*, ureteral, and *fourth*, renal, including the kidney, and its pelvis.

According to its cause, it may be classified as follows: 1. Traumatic, including accidental injury, and also that occurring from stone. 2. Inflammatory, including acute nephritis, chronic inflammatory affections of the kidney, tuberculosis, acute and chronic inflammation of the pelvis of the kidney, ureter, bladder, prostate, and also acute urethritis. 3. Vascular, blood dyscrasie, such as hemophilia, etc., and venous obstruction of the kidney, especially that due to torsion in mobility of the kidney; hydronephrosis, varicosity of the vesical veins, especially that due to prostatic engorgement. 4. Chemical, in which class should be placed hemorrhage from irritating drugs, as turpentine, cantharides, etc. 5. Toxic, in which the hemorrhage is the result of vascular changes occurring in severe toxemias, such as that resulting from malaria, acute yellow atrophy of the liver, yellow fever, scurvy, pregnancy, etc. 6. Neoplastic. 7. Parasitic.

The study of hematuria may be classified according to the location and origin and to do this I shall take it up systematically, beginning with the urethral tract

The etiological factors of this tract are

anterior and posterior gonococcal infection, granular urethritis, ulcers, papillomas, strictures, abscesses, foreign bodies, calculi, tuberculosis, instrumentation, acute prostatitis, seminal vesiculitis, and syphilis. This group covers the class we usually find producing hemorrhage in the urethral tract, therefore blood in the urine is significant of pathology and should be located and treated.

Vesical hematuria is caused most frequently by tumors of the bladder, either benign or malignant. A benign tumor, if left undiagnosed and untreated, will, in time, be transformed into a malignant tumor. Prostatic hypertrophy, both benign and malignant, is next in frequency, then tuberculosis, granular cystitis, dilation of the vesical veins due to inflammatory condition of the prostate, ulcers, instrumentation, inflammatory changes in the bladder wall, external tumors producing pressure, and syphilis, which authorities have scarcely mentioned and consider a rare condition, but which, in my experience and observation, is a very frequent causation. It is evidenced by an infiltration and thickening of the mucous membrane, most frequently at the neck of the bladder and extending over the trigonum and the para-trigonal space. In a syphilitic bladder we may find a cluster of papillomas, other times sessile in character, again as a polypoid growth, and also a general infiltration, resembling very much an active malignant bladder, but it is not so painful nor does it bleed, to the same extent as the malignant.

I have had quite a number of these cases of syphilitic bladder in my experience, and read a paper on this subject before this section two years ago. In that, I emphasized the necessity for a Wassermann test in all bladder pathology.

Ureteral hemorrhage is due more frequently to tuberculosis, than calculi, in its passage or becoming lodged in the tract, traumatism, and torsion, due to movable kidney. There may be other, but these are the most frequent causes. Therefore, this is significant of a pathological condition and calls for a true diagnosis.

Hematuria arising from the kidney is frequently due to a pyelitis, both acute and acute exacerbation, also to erosions of blood vessels caused by a movable calculi, to pyelo-nephritis in certain stages, to a pyonephrotic kidney in certain stages of suppuration, to nephrolithiasis, to hydronephrosis, to tumors of the kidney, which are considered by a great number to be the most frequent cause, and to tuberculosis, which is the next in frequency.

The term symptomless hematuria, which is used so unfortunately, applies to a group of

\*Read in Section on Genito-Urinary, Urological and Radiology—Annual Meeting, Oklahoma City, May, 1920.

cases in which no cause for hematuria can be demonstrated. This expression has been used to the patient's incalculable harm. If the physician, by the usual method, fails to locate the cause, he is inclined to pronounce it symptomless hematuria, thereby excusing himself and giving up the search. The word symptomless is a misnomer and should never be used. It is far better to confess that we have been unable to locate the exact origin and then continue the search until it is found. In a few cases of my own, this so-called symptomless hematuria has proven to be of syphilitic origin, and is due, I think, to a syphilitic infiltration of the mucous membrane of the pelvis, calices, tubules, and glomeruli. In this case, exertion and straining will produce a hemorrhage which very quickly subsides with rest, and which also responds beautifully to appropriate antisyphilitic treatment.

The development of hematuria in children is always suspicious of tuberculous pyelitis, pyelo-nephritis, and renal growths or tumors. As in other cases, this is nature's warning and calls for immediate investigation, as it is significant of grave and impending danger.

#### Diagnosis.

The diagnosis of hematuria of the genito-urinary tract has for its object the discovery, first, of blood in the urine, and, second, of the source of the hemorrhage. The presence of blood in the urine may be told by its color and by chemical and microscopical tests. The presence of red blood cells in the microscopical field is characteristic, and distinguishes true hematuria from hemoglobinuria.

In a systematic diagnosis it is necessary to have a complete history, then a thorough external physical examination. In the male, the three glass tests of urine, and in the female, the two glass tests should be made. Digital examination of prostate gland and vesicles is made. Search and determine whether or not there is a stricture. Visual examination of the urethral tract is made by cysto-urethroscopy. This is preferable to the old endoscope, which was formerly used.

In vesical examination, the cystoscope should be used, the size depending on the age of the patient. At the first examination, because of certain complications, it is sometimes impossible to locate the source of bleeding, and in that case the patient should be placed in bed with complete rest, daily bladder irrigations and supportive treatment, and another attempt made. Then we can usually make the diagnosis. On account of the bleeding it is very difficult and a continuous irrigation through the cystoscope is necessary while making the examination. On account of the inflammatory condition of the bladder it is sometimes im-

possible to locate the ureteral orifices, and in that event, I use indigo carmine intravenously, and when the blue is emitted it tells us definitely the position of the orifice.

The diagnosis of ureteral hemorrhage and complications is most frequently made by the introduction of opaque catheters and radiography.

The diagnosis of renal hematuria in whatever form can be summed up as follows: Catheterizing cystoscope introduced in the bladder, each ureter and renal pelvis catheterized with an opaque catheter, urine collected from each kidney and specimens sent to laboratory for a complete examination, with instruction for a guinea pig inoculation for tuberculos.

While the catheters are in the renal pelvis I make an indigo carmine functional test by injecting intravenously 10 cc. of .4 of 1% solution. In a normal kidney and even in a moderately crippled kidney, the blue will show through the catheters in from five to ten minutes. But when we have an advanced case of pyelo-nephritis, hydronephrosis, nephrolithiasis, pyonephrosis, tumors or suppurative conditions, no blue will appear in a reasonable length of time. So indigo carmine is a fairly accurate and quick method of determining the renal function.

Some prefer phenolsulphonephthalein, and I use that as a routine hospital procedure to get the combined renal functions. This is especially necessary before any serious operation is performed, as the prognosis is based on its findings.

The next step is the radiograph, with the opaque catheters in the ureters for a guide as to position of the kidney. If a stone is in the ureter or kidney, the radiograph, if properly made, will detect it. Frequently, if the kidney is enlarged or displaced, it will be shown by the picture. A second picture should be made immediately after injecting through catheter a thorium solution in each pelvis, and a pyelogram made which will show the size of each pelvis and calices.

So in making our examinations, the laboratory, the microscope, the cystoscope, the ureteral catheters, opaque solutions, and the x-ray are indispensable aids in arriving at an accurate diagnosis.

#### Conclusion.

Hematuria is of grave significance and is a symptom of a pathology which should be thoroughly worked out. The seriousness of hematuria has been disregarded too lightly by both the laity and the physician.

In hematuria, as in all other diseases, the progressive physician should be alert to dis-



cover early pathologic conditions in order that relief may be prompt and effective, thereby eliminating much suffering and many fatalities.

### Discussion

*Dr. J. Hoy Sanford, Muskogee:* I would like to compliment Doctor Wallace on the paper. There is hardly anything that I believe can be added to the contents as brought out in regard to the finding of the real cause of hematuria, as he has so thoroughly demonstrated in his paper that the use of the cystoscope with the catheteral collection of urine and its examination will in most cases disclose the true cause; of course, at first the lower genital tract should be thoroughly looked over. I enjoyed the paper and want to thank Doctor Wallace.

*Dr. E. L. Cohenour, Tulsa:* I have thoroughly enjoyed Dr. Wallace's excellent paper; also the discussion. It seems to me that we frequently have hemorrhages from the lymphoid tissues in the veru-montanum. I should like to hear what Dr. Wallace has to say on this.

*Dr. J. H. Hays, Enid:* Mr. Chairman. As Dr. Wallace said, hematuria is a symptom of a serious disease, and the first thing that I want to know when a patient appears with blood in the urine is the source; then after the source, the cause. In my experience the most frequent cause of hematuria has been neoplasms, a new growth of some kind; the next most frequent cause, injury; and the third, tuberculosis.

Beginning with blood in the urine, the first thing I usually do on inquiring into the source, is to ascertain if there is a history of an injury, has microscopic examination of the urine been made. Why? Because if the microscopic examination shows blood casts in the urine, I am pretty sure from the beginning that the source is in the kidney. If there are no casts in the urine, I am pretty sure the trouble is somewhere between the pelvis of the kidney and external meatus.

If you have an injury or trouble with a ureter, it can be quickly detected by an examination with a cystoscope. The cystoscope, unless you have an ulcer or a very irritable bladder, will tell you right away whether it is coming from one kidney or the other, or both.

In case there is blood coming from the ureteral opening, the question then arises, Where is the bleeding point? In the ureter; pelvis of the kidney; or the kidney itself? As stated before, if there are no blood casts, we can eliminate the kidney.

Now we have to determine the source in the ureter or the pelvis of the kidney. I have

tried to solve it in this way, by passing a large catheter up the ureter about half way; if the urine coming through the catheter continues to contain blood, we know the source is higher up, or if it does not contain blood, we know the source is in the lower half of the ureter. If it does contain blood, then pass the catheter up into the pelvis of the kidney. If the urine coming through the catheter now contains blood, you know the source is in the pelvis of the kidney.

The most frequent cause, as just stated, is neoplasm. If you find blood coming from the pelvis of the kidney, no casts in the urine, as the Doctor has stated, the x-ray will help to make the diagnosis, as a small growth in the kidney pelvis will produce a distortion of the radiograph. If it is a chronic inflammatory condition, you will have an enlarged and "rounded out" kidney pelvis with considerable destruction of the calices.

There is a form of hematuria due to bleeding from the pelvis of the kidney that is difficult to diagnose and that is in those cases where the blood comes from the calices themselves without any apparent destruction. These cases are usually classified under the term, "essential hematuria." The only way that I can diagnose this class of cases is by the process of elimination. That is there is no destination of the kidney pelvis; no history or injury; no infection, etc.

If we find that the hemorrhage is coming from somewhere in the ureter and no history of an injury, we are practically sure that it is due to neoplasm, and by passing a large ureteral catheter we can detach the growth and thus remove the cause. Of course ureteral hemorrhages might be due to an ulcer produced by a stone and by dilating the ureter with a large catheter the stone will usually pass down and the erosion will heal itself.

One of the most troublesome forms of hematuria, is hematuria from new growth in the bladder. My experience in the removal of the papilloma of the bladder with the electric cautery has not been as gratifying as many have reported. I now have a case of hematuria that I saw when I first came to the state, a little over four years ago. I have removed (or I thought I had) by the electric cautery six different times in the past four years. I saw him only yesterday and the patient stated that he had just had another hemorrhage. I examined him again and found that the growth is nearly as large as a hen's egg. This growth is made up of a great number of small growths spreading out over all the bladder when partially filled with water. This happens to be one of those cases that I have not been able to operate. In my mind there isn't any question

but this growth is becoming malignant, but the patient is comfortable most of the time and apparently in excellent health and I have not been able to persuade him to look at this condition as seriously as I do myself.

There is another class of cases of hematuria, secondary to contagious disease, especially scarlet fever and measles. This class of cases needs no interference, the history is usually clear and rest in bed nearly always effects a cure. Hematuria due to malaria is the exception to hemorrhage of the kidney without casts. The diagnosis can be made by examining the patient's blood for the malaria parasites.

The important thing about cases of hematuria due to injury of the kidney is the treatment. I was taught, and I presume a good many of you were taught, that in injury of kidney, the thing to do was to put the patient to bed and keep him quiet. I am sorry to say that I followed this teaching for several years with two or three fatalities that could have been prevented by surgical interference. In my judgment whenever there is profuse hematuria, due to injury of the kidney, the kidney should be cut down upon and packed and not removed unless severely lacerated. Excellent results will follow by packing the injured portion of the kidney with gauze to control the hemorrhage for twenty-four to forty-eight hours.

In hematuria due to tuberculosis, the source is practically always the kidney and the only remedy is the removal of the kidney, providing only one is affected; if both are affected, nothing can be done except general treatment of patient.

*Doctor Wallace*, closing: Mr. Chairman. In making the diagnosis, Doctor Hayes mentioned about finding or failing to find casts in the urine. This is often the case. One day a specimen of urine will contain numerous casts and at other times none will be found, so it is necessary to make daily urinary analysis for a number of days in order to get a true interpretation.

In pyelitis we will frequently find pus on one examination and entirely normal specimen the next day, so in these conditions we must make numerous tests. Also cultures to be made from catheterized specimens and then make animal inoculations, especially so for suspected tuberculosis. The symptomless or painless hematuria which was mentioned, I wish to emphasize the fact that it is an expression of some serious condition. The main object of my paper was to impress upon the people that whenever you find blood, there is some pathology. It matters not from what tract, but we should try and locate that particular place, whether it be in urethra, bladder, ureters, or kidneys. It

means that something is wrong and is a warning of danger.

Someone mentioned urethral granulations causing hematuria. We frequently find granulations in the bulbo-membranous and prostatic urethra which will produce bleeding, but it is mild in character and usually noted at the termination.

With the use of the cystoscope, catheters and x-ray, we can usually ferret out and determine the source and character of the hematuria.

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## DIAGNOSIS AND TREATMENT OF STRICTURE OF THE URETHRA\*

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The successful diagnosis and treatment of stricture of the urethra require a knowledge of anatomy, patience of high order, and no little technical skill.

The diagnosis is usually easy. Any stricture found in the penile urethra is organic. Behind this it may be spasmodic. The history of the development of the urinary symptoms is of great importance in making a diagnosis. True, or organic stricture, always develops slowly, since the constriction is the result of scar tissue formation. A spasmodic stricture may develop in a few hours following inflammation or irritation of the urethra and cause complete retention. An impassable stricture, causing complete retention, coming on suddenly, is always spasmodic. An organic stricture partially occluding the urethra may be made complete by spasmodic contractions so that we have both kinds to contend with at the same time.

Strictures of the urethra are, in the vast majority of cases, due to gonorrhea. They may, however, be the result of trauma or unwise medication. Generally speaking, a stricture that will not admit a No. 24F. sound should be treated. Strictures above this size where there is no infection behind, may be left alone provided they are producing no unpleasant symptoms. However, with a specific infection lurking behind a stricture, of whatever size, radical incision or dilatation must be done.

The most common symptom of stricture is a purulent discharge. When a discharge from gonorrhea has lasted six months or longer, stricture is usually present. The first subjective symptom is increased effort in voiding. The next is a modification in the size or shape of the stream. This may be flattened, twisted, or expelled in two jets. It must be borne in mind, however, that prostatitis, urethritis, or urethral spasm, may produce the same changes in the stream. Perhaps the most characteristic change is the loss of force with which the stream is projected. At first the stream maintains its force due to the compensatory hypertrophy of the bladder muscle. As the stricture narrows this hypertrophy fails to overcome the obstruction and the stream emerges without force and falls perpendicularly or dribbles. In these cases the semen also is not ejected

with force and may regurgitate into the bladder. When the hypertrophied bladder muscle fails to overcome the resistance offered by the stricture, retention with its consequent ill results. Long before this stage is reached the stricture should be recognized and treated if the best results are to be obtained. After extravasation or fistula has occurred the treatment is much less satisfactory and the end result less promising.

By far the most satisfactory instrument utilized in making a diagnosis is the bougie a boule. The distance from the meatus can be measured accurately and the size of the stricture calibrated. The firm resistance offered by a true stricture and the tenacious hold that it exerts when the instrument is withdrawn distinguish it from spasmodic stricture which is more yielding, feels "softer" and does not exert such a decided pull. Should doubt still remain after a careful examination with the bougie, an injection of 1% novocaine followed by an examination will clear the matter up. In extremely sensitive patients a general anesthetic may be necessary. With strictures so small that a bougie can not be used, resort must be had to the whalebone filiform with a grooved sound, or the "whip-end" flexible catheter.

The urethroscope is a valuable adjunct in clearing up the diagnosis. The straight instrument with the direct light should be used. The strictured area seen through the urethroscope does not fall together in the radiating folds as seen in the normal urethra, but the opening is held apart by the scar formation. A distinct, whitish, glistening band is seen encircling the canal. In recent stricture this band is usually inflamed or eroded.

After a diagnosis as to size, location and character, the method of treatment must be selected. We have to select from dilatation, incision, excision, and electrolysis. Stricture of the meatus is not dilatable and must be cut. Strictures of the anterior urethra respond rather poorly to dilatation and I find it more satisfactory to incise them at once. Those found in the membranous portion will, in a majority of cases, respond well to dilatation. Extensive tortuous strictures of the deep urethra, of long duration, yield very poorly to dilatation. Because of the great amount of scar tissue present, and their tendency to recur when treatment is discontinued, incision is not always successful. In these cases excision of the strictured area should be resorted to.

Dilatation of a stricture may be done with sounds, bougies, or the dilator. When dilatation is practiced, the operator must be careful that it is not carried out too rapidly. An increase of two sizes at one sitting is usually enough. A long enough interval between

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stretchings to permit the soreness to disappear must be allowed. After the maximum dilatation has been reached, it is necessary to continue the soundings over a period of time with gradually increasing intervals. I make it a point to have these patients report back for examination every six or eight months after an apparent cure, to make certain that the stricture is not reforming.

Strictures of the pendulous urethra should be treated by incision. This may be done easily with the urethrotome with a concealed blade. The incision should be begun well behind the stricture and carried into the healthy tissue in front. The incision should be deep enough to completely sever all the scar tissue. To insure that the stricture has been cut deep enough, a large sized sound should be passed immediately. At regular intervals of from six to eight days the soundings must be continued until the wound has healed. It is well to have these patients report back for examination every six to eight months. The bleeding in these cases is easily controlled by pressure. An urethral injection of novocaine 1% retained for twenty minutes will render the proceeding practically painless.

Strictures of the deep urethra that are not amenable to dilatation may be incised with the urethrotome. The bleeding in these cases is sometimes very profuse and difficult to control. Better and more lasting results are obtained, I believe, by external urethrotomy. When this method is used the stricture may be incised or excised as indications require. Treatment of strictures by electrolysis has deservedly fallen into disuse.

I have purposely refrained from taking up in detail the technic of the various procedures outlined. My aim has been to lay down the general principles as I see them and meet them in my work. I wish to speak here, in closing, a few words of caution. While the urethra will, and frequently does, stand for a great deal of abuse, the utmost care and gentleness should be used in all manipulations.

The confidence of the patient in the operator is no small factor in the treatment. Unnecessary roughness and undue haste on the part of the operator have often caused patients to refrain from treatment until the condition has far advanced. Bear in mind also that gonorrhea can not be cured behind a stricture.

### Discussion

Dr. W. B. Pigg, Okmulgee: Mr. Chairman, and Gentlemen of the Convention. Dr. Taylor has read you such an excellent paper that it seems a pity that we couldn't have a better man to open the discussion than myself. As most of you know, when I write a paper and

read it, everybody stays awake; and when I speak, it is very difficult to keep them awake. I am a good deal like Rousseau on that certain occasion that he had to address a body of men. He felt his timidity from doing so and wrote his speech out and recited it down in the cellar until he got it very proficient—every word of it—and when he got up before the learned gentlemen he forgot every word of it. I am in a good deal the same position when I come to speak extemporaneously. I forget the best things I want to say and say frequently the things that I don't want to say.

A stricture, however, is something that we have with us always, and by always, I mean to be literally correct. It is a result of carelessness, and they get themselves in such a condition that they cannot urinate, and then the doctor comes along and sees them and he gets them dilated so that they can get along tolerably well, and he never does see them any more until they get it again. So, you have them always with you. At least I do. I don't know whether the practice of you gentlemen is different from mine, but I am treating patients now that I treated sometime ago when I first located in Okmulgee and I will probably treat them again next year unless somebody else gets the case. I give to them all the care and caution and advice that I can, but still they are backsliders from the physician's office, and they are a source of a great deal of trouble to themselves and to some of the physician as well.

The treatment of strictures I do not feel competent to take up at this time, because I came here to learn and not to instruct. I just desire to pass the bouquet around to the doctors *multum in parvo* because I don't think it would be possible to put in the same number of words as much useful information and leave out as much useless information as the doctor has incorporated in his paper. The man who opens the discussion is a kind of a short stop between the bulk of the intelligence, and a connecting link between the intelligence of the man who read the paper in the first place, and realizing that and hoping that if I could remember to differ from the doctor on some things that would provoke a discussion I would gladly do so, but since I can't I will thank you for the honor of addressing you and sit down.

Dr. E. L. Cohenour, Tulsa. I want to compliment Dr. Taylor on his excellent paper. He brought out all the points, I think. There are just a few points I would like to emphasize and some of them that I had in mind were these. The getting of the history, I think is very important, because lots of times a man will come in and will have symptoms of a stricture and if you get the history of the case

you will find that that is quite important in these cases. And then I also wish to emphasize the importance, and I think I have, of having a microscopic examination made of the discharge which is practically always present, and I try in that way, of course, to find out the determining infection. In cases where there is an acute gonococcic infection you have to be a little bit careful about instrumentation, particularly where you have an acute inflammation of the urethra because of the danger of injury to the patient, and you will lose a good patient.

*Dr. Curtis R. Day, Oklahoma City:* The paper was a most excellent one, and there is but one thing I want to emphasize. That is the strictures we meet with are the result of scar tissue, and it is the action of the scar tissue that produces the stricture, and that in the severing of this scar tissue we invariably produce more scar tissue. We should also warn these patients that following operation a more severe stricture must result unless they are properly followed up and properly treated. I think that the mistake that most of us make is in failing to impress upon the patient at the time we divide the stricture that they must continue treatment as a matter of years. Therefore in that way we should avoid the proposition of discharging a patient and permit him to come back again. Dr. Pigg possibly don't discharge his patients, but they simply go away from him and then come back. If we should impress that point—if we can emphasize that sufficiently to impress it upon the minds of the patients, and the necessity for that long continued dilatation, why we will have accomplished the best results.

*Dr. W. J. Wallace, Oklahoma City:* Just a few points in discussing this paper. First, a stricture—once a stricture and for many years you will have a stricture—more or less the rest of your life—therefore, as Dr. Day says, they must be instructed and advised to return and keep them under observation.

In the treatment of stricture the first thing is prophylaxis. Stricture begins usually—we are speaking now of a stricture due to gonorrheal infection—strictures begin in that stage as chronic ulcers—just at the beginning of the C. G.—usually about the sixth and running over into the eighth and tenth week. It begins first as thickening and swelling and reddening of the tissue, and this, if untreated—if the patient is discharged as cured and untreated at this time, some year or two years or five years later we find that this patient has developed this fibrous scar tissue. So, the best thing to do before we discharge our patient is to see that the canal is in proper condition—no stricture formations, and begin to treat it at that time.

Stricture is a serious condition and the laity don't seem to appreciate that fact. Stricture is considered below a twenty or even a twenty-four to be a serious condition. It requires a great deal of work on the bladder and on the prostate and the other adjacent organs to expel this urine through the small canal. Therefore you are bound to have trouble over a long continued time and maybe nephritis may result. So, it should be impressed upon the patient—the seriousness of a stricture and thereby avoid some complications of the kidney later on.

In my earlier practice quite frequently I operated for stricture through the external urethra just below the scrotum, but in the past few years that procedure has been discarded. With a small \* \* \* attached to the sound of the catheter we can get our starting point and can gradually enlarge the stricture to the ordinary size without making any kind of an operation. I think that in the treating of a stricture, if it is a stricture of small size, we should give an anesthetic, either general or else a spinal anesthetic, which is very easily done, and dilate the stricture at one setting if it is a stricture of this size. It takes a long time, very tedious, and a great deal of pain attached to it, to work it slowly up to the size we should carry our dilation. So, I usually advise, if it is a small one, a general anesthetic or a spinal anesthetic and stretch all at one time.

About cutting the stricture. I don't believe much in that at this time. There is only one form that I consider should be incised; that we use the ureterotomy on. A stricture in the posterior urethra should never be cut. You can do as much with gradual dilation and you will not have hemorrhages nor produce scar tissue, but the stricture in the anterior urethra is the one that we use the ureterotomy on. There is a resilient stricture and one which we can stretch and withdraw the sound, and this stricture will contract—just comes down like a piece of rubber or elastic. We can do that time and time again and make no progress whatever, and that one, we should cut; otherwise, do not. I think that we can accomplish better and safer results to our patient. And every time you use the ureterotomy and cut this tissue you have scar tissue resulting, and I think you do better to use just gradual dilation.

*Dr. J. C. Mraz, Oklahoma City:* This paper has already been thoroughly discussed. I think the paper was a very good one. I would like to cite a case that came to me not long ago that might possibly be instructive. It was not truly a stricture, but an allied condition. The patient came to me with the following history: about a week previous he met

with an accident; had fallen astride of a two-by-four and from the time of the injury he was entirely unable to pass his urine; had a complete retention; the doctors that he had called upon in his home town took turn about trying to catheterize him, unsuccessfully each time. They used soft rubber catheters and they used metal catheters; they performed a suprapubic tapping on the bladder several times during the week that they were attempting to catheterize him and when he was brought to me his bladder was again distended almost to the umbilicus. We prepared immediately for an external ureterotomy, but before doing it I thought it would do no harm to attempt to use the catheter on him. I took a silk elastic catheter, cocainized the urethra, and the catheter slipped right into the bladder accidentally, of course, happening to catch the torn urethra and it was, no doubt, a case of a ruptured urethra due to the fall, and passed into the bladder. I mention the point because I think the elastic silk catheter is very adaptable to this kind of procedure. It is not resistant enough to do damage and still not as elastic and does not give as easily as a soft rubber catheter, and it is more apt to follow the curve of the urethra. I allowed the catheter to stay in situ for forty-eight hours and after that I had very little trouble in passing sounds and I still pass a sound at long intervals to avoid stricture forming.

*Dr. C. T. Hendershot, Tulsa:* I am not a genito-urinary surgeon, but I have practiced medicine for twenty-four years and my work on this line was more along gonorrheal strictures than anything else. But I, myself, have been the victim of a stricture, possibly not of as violent a character. As Dr. Cohenour knows, about four years ago I was unfortunate enough to slip in getting out of my buggy and I fell across the wheels and produced a traumatic stricture with an abscess formation and all the things that go with it. I lay up in bed for six or eight weeks and recovered sufficiently to go the Baltimore and consult Dr. Young, and he advised me to go back to Tulsa and have it dilated, which I did for five or six months, as most all of them did with a little bit of relief occasionally. But it was a condition that I had to go through with all the time. And two years ago the condition became so serious that on the advice of some of my good friends at Tulsa I went to Kansas City to a specialist. They put me on the operating table and put me through a dilatation one day and waited four days and then repeated it the second time. The pain caused by this procedure was intense and they pronounced it the worse case they had ever experienced in Kansas City. But they got the dilatation through and I came back and had

to wait perhaps for a matter of three or four months, and the condition developed again. Associated with this I had to wear one of these nice rubber tubes down my leg. It was a very unpleasant thing; it was running into a septic condition with a chill every two or three weeks. My mind was on this continuously. So, I made up my mind to see somebody else. I looked over the field and they said Dr. Banks at St. Louis was a specialist, and while waiting for some of the patients to get well so I could get over to Saint Louis the urethra ruptured. I went to Saint Louis and when I got to Springfield I became unconscious and arrived at Saint Louis with a temperature of a hundred and five and a pulse of a hundred and forty-two. They said there was no use of doing anything but operating on the urethra, which they did. I came off of the operating table in a very bad condition and they didn't think I could possibly live, but I did, and gained about forty-four pounds. I have had absolutely no symptoms. I can pass a good stream of water now and it is a pleasure for me to urinate. But I go to my friend, one of the genito-urinary men over at Tulsa, every two or three weeks and have him use that nice dilator on me, and I am able to have it done without a local anesthetic.

In talking to Dr. Lewis before I left the hospital, I was of the same opinion that Dr. Wallace was, that posterior ureterectomy was a thing of the past—but he said that he was using it a great deal and that they had adopted it almost as a universal treatment.

Now, about special and severe chronic cases where the scar tissue was so hard that you couldn't get through it with a sound—and Dr. Wallace also spoke of spinal anesthesia. Now, from what I can learn, spinal anesthesia is not being used at all any more by the men around Saint Louis. Some I talked with in Louisville recently who do this kind of work were afraid of it. They are all scared of it back there. Doctors there won't use it.

There is one point that I haven't yet heard brought out, and perhaps it has no distinct bearing on this discussion, but I want to speak of the rapid emptying of the bladder after dilatation. In Kansas City, after this rapid dilatation they put in a very large sound—I don't know just what size it was—and left it either six or eight hours with instructions to the nurse that when I felt a desire to urinate she should let me up. But while she was gone out to her dinner I got up and stepped into the bathroom and emptied my bladder. When this time came around the nurse happened to be out to her meals and I removed the straps and left the room and stepped into the bathroom and emptied my bladder—about a gallon



of excessive urine, and I promptly collapsed. They got me back in bed, and it taught me a lesson. I went up to Saint Louis and I told them up there when I got ready to empty my bladder I didn't want any more rapid emptying.

I know some men have had some experience, and as a man who has had experience with a stricture I want to advise you genito-urinary men that they appreciate a whole lot just shooting a little cocaine down in that urethra before shooting the sound down. It is much different to you.

*Dr. Taylor, closing:* I purposely refrained in that short paper from mentioning the cure of a stricture. I spoke of treatment for the relief of strictures, but not the cure. I think the saying is true, "once a stricture, always a stricture." The scar tissue is there permanently. We may enlarge the opening but we still have the scar tissue present. The discussion I must say was very instructive to me. Relative to the spinal anesthesia, personally I never have used it and I cannot see its advantage over a general anesthesia. If the local anesthetic will not handle the condition, I would be a little afraid to attempt the spinal anesthetic. I would prefer ether.

*Dr. Hendershot's* recital of his own condition was very interesting to me, and it bears out a point that I have always maintained, and that is, that we do not do enough external urethrotomies. We know a dense scar tissue has been formed over a long period of time. We dilate these tissues and get simply a temporary relief. We will get a longer relief by the incision of a great deal of this scar tissue and letting new tissue form.

As to the excess of urine, I take it for granted that men who have been doing this work would not knowingly empty a distended bladder at once. Those that have done it have seen the shock that almost invariably follows. So, as a matter of routine, we would not empty an over distended bladder except by degrees.

#### A Cheaper Way

"My dear sir, nothing but an operation will save your life."

"What will it cost?"

"About \$500."

"But I have only \$150."

"In that case let's try what these pills will do."

According to Dr. Rosa, of the United States Bureau of Standards, 93 cents out of every dollar of Uncle Sam's money last year went for war—past, present, or to come—and one cent went for education and improvement of the public health.

## THE DIAGNOSTIC VALUE OF BLOOD CHEMISTRY\*

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The word diagnostic is to be considered as including the term prognostic, as blood chemistry is often of considerable value in this special phase of diagnosis.

The study of pathological anatomy has been broadened to include pathological physiology. The physician today is not only studying the etiology and the end results of disease, but is working out the development and progress of diseased conditions.

The blood probably is the most important tissue of the body as it carries nutrition to the cells of the body and removes the products of metabolism.

These waste products may be changed in the blood, assimilated in other tissues or thrown out of the body by the organs of excretion, especially the kidneys.

The cellular elements of the blood have for years been studied by the physician to give him certain valuable information that he could not obtain by his physical examination of the patient. It is not surprising, therefore, that a study of the chemical composition of the blood plasma should yield valuable data as well.

Whole blood is composed of the cellular elements and the plasma. The plasma contains certain nitrogenous elements along with organic and inorganic salts, fats, gases, etc. The nitrogenous elements of the plasma are divided into the proteins and the non-proteins. The proteins include serum albumen and serum globulin. The non-protein group includes urea, uric acid, creatinin, creatin, etc. The other classes include sugar (glucose), sodium chlorid, cholesterol, ammonia, etc.

As time will not permit of discussing all these various substances, we will confine our remarks to those non-protein nitrogenous elements, urea, uric acid, creatinin, and creatin, which go to make up the total non-protein nitrogen; and to the organic substances, glucose and cholesterol. These are the substances that are meant when one speaks of blood chemistry in the limited sense of the term. It is the determination of these that is becoming of value to the physician. The estimation of the carbon dioxid combining power of blood plasma, the H-ion concentration of blood, and the various other tests, to establish the presence of acidosis, must be omitted at this time although their value is probably even more firmly established than the points under discussion.

\*Read before the Oklahoma County Medical Society, December 11, 1920.

The first point that we wish to emphasize is that diagnosis, in general, is impossible from the blood chemical tests alone. These, like all other laboratory procedures, must be considered only as additional clinical symptoms. Their value must be determined by weighing them in association with the other data obtainable.

The normals for the factors under consideration, although varying somewhat, as given by the different authorities are about as follows:

Non-protein Nitrogen	25- 35 mg. per 100 cc
Urea Nitrogen	10- 18 mg. per 100 cc
Uric Acid	0.5- 3 mg. per 100 cc
Creatinin	0.8-2.5 mg. per 100 cc
Creatin	5- 10 mg. per 100 cc
Sugar (Glucose)	60-120 mg. per 100 cc (usually reported 0.06-0.12%)
Cholesterol	150 mg. per 100 cc (usually reported 0.15%)

A brief outline of the technic used in determining the factors should assist us in fixing them more firmly in our minds. As nearly all of these substances show a "digestive rise" after the taking of an ordinary meal, the blood should be collected from 4 to 6 hours after the taking of food, preferably in the morning before breakfast. About 11 cc. of blood are collected from the vein of the arm the same as for a Wassermann test. This is transferred immediately to a bottle containing from 20 to 25 mgm. of potassium oxalate to prevent it from clotting. Mix well and measure out exactly 10 cc. into a dry flask, add 7 volumes of distilled water, 1 volume of sodium tungstate solution, and 1 volume of 2-3 N, sulphuric acid. Mix well during the addition of the acid and allow to stand for a few minutes until a chocolate brown color appears, when all the proteins of the blood will have been precipitated. Filter through a dry filter into a dry, clean flask, this filtrate contains all the non-protein nitrogenous elements, also the glucose, and is now ready for the respective tests.

For the non-protein nitrogen 5 cc. of the filtrate are subjected to the micro-Kjeldahl method for nitrogen determination in which the nitrogen as ammonia is separated by distillation, Nesslerized, and compared against a standard containing a known amount of nitrogen, in a Dubosq colorimeter.

The urea nitrogen is usually about 50% to 60% of the non-protein nitrogen, of which of course it is a part. 5 cc. of the original blood filtrate are digested at 40 to 55 degrees C. in a large test-tube with a small amount of urease solution (a soluble enzyme of the soy bean or jack bean). This urease transforms the urea to ammonium carbonate from which the ammonia is removed by distillation and estimated in a colorimeter the same as for the non-protein nitrogen.

For the uric acid 10 cc. of the original blood filtrate are treated in a centrifuge tube with a solution containing silver lactate and lactic acid, centrifuge for a few minutes to separate the silver urate which is formed as a precipitate. The silver urate in the bottom of the centrifuge tube is treated with a solution containing sodium chlorid and hydrochloric acid. This sets free the uric acid from the silver urate and it is then in solution. Allow to stand for a few minutes and decant the supernatant fluid. To this add separate solutions of sodium sulphite, sodium cyanide and sodium carbonate. A standard of known uric acid content is also treated in the same way. Dilute the unknown solution with a little water and add phospho-tungstic acid reagent to both the unknown and the standard. A blue color is here developed in each. Add distilled water to each to bring volumes up to 50 cc. and compare colors in a colorimeter.

In the creatinin determination 10 cc. of the original blood filtrate are treated in a small flask with sodium picrate solution. A yellow color develops somewhat deeper in color than the picrate solution alone. A known solution of pure creatinin is treated in the same way. These after standing for a few minutes are compared in a colorimeter.

Creatin is determined by first dehydrating it by adding weak hydrochloric acid and autoclaving for about 15 minutes at 130 to 150 degrees C., when it becomes creatinin. The total creatinin may now be determined as above and by subtracting the pre-formed creatinin from this, the creatin is obtained.

For glucose 2 cc. of the original blood filtrate are heated in a 25 cc. test-tube with an alkaline copper tartrate solution exactly 6 minutes in a boiling water-bath. A standard solution of pure glucose is treated in the same manner at the same time. After cooling, each is treated with tungstic-molybdate reagent, a beautiful blue color developing. Fill each with distilled water to the 25 cc. mark, mix and compare in a colorimeter.

Cholesterol occurs in the blood both in the corpuscles and the plasma and therefore whole blood, rather than a blood filtrate, is generally used in its determination. One cc. of whole blood is mixed with plaster-of-paris, and dried; from this the cholesterol is extracted with chloroform. A definite volume of this extract is treated with anhydrous acetic anhydrid and concentrated sulphuric acid. A standard of pure cholesterol is treated in the same way or a certain percent solution of the dye naphthol green B. may be used. A color comparison is made in a colorimeter.

Since the kidneys are the most important regulators of the amount of non-protein nitro-

gen in the blood, it is logical to suppose that in diseases of these organs the estimation of these elements would be of greatest value. This had been found to be the case, but there are other factors which influence these amounts which must always be considered at the same time. Mosenthal considers four factors that tend to increase the non-protein nitrogen in the blood: (1) retention of the elements by the injured kidney, (2) inspissation of the blood due to loss of water, (3) increase of protein catabolism, (4) the chemical combination in which the non-protein nitrogen exists. Other authorities add a fifth and sixth, a weakened circulation and increase of protein intake.

Chace and Myers state that in beginning chronic interstitial nephritis these factors begin to increase early, while Webster finds little increase in chronic interstitial and chronic diffuse nephritis until hypertention and danger of uremia exists. Practically all authorities are agreed, however, on the fact that the uric acid is the first to accumulate in the blood, then the urea, and finally the creatinin. This "stair-case" fact of retention would indicate that uric acid was the most difficult for the kidneys to excrete, urea next, and that creatinin is the most easily to eliminate as it is the last to accumulate in the blood. This is an important prognostic point because those cases that have a high creatinin retention are the ones most likely to go into uremia and end fatally.

Mild parenchymatous nephritis usually shows little retention provided sufficient uninjured kidney substance remains to carry on the normal function. In these cases, however, if a sudden retention of urea and creatinin is discovered, it would indicate that uremia was impending and drastic methods should be instituted to avert it.

In the majority of nephritis cases these elements increase in the blood in ratio with the severity of the condition.

Chronic passive congestion of the kidneys very seldom causes much retention of these elements.

In cases of unilateral kidney involvement, as pus kidney of one side, blood chemistry gives very little assistance in finding out how much work the other kidney is able to do. There is no way by this means to differentiate whether the uninjured part of the diseased kidney is doing more work than the supposedly well kidney.

The finding of uric acid accumulation in the blood in practically all cases of nephritis would indicate that the interpretation of the uric acid diathesis, so long considered pathognomonic of gout, must be corrected. It is, however, true that practically all cases

of gout show a uric acid retention, but the non-protein nitrogen in the blood is usually within normal limits. This is of diagnostic value, as in non-gouty arthritis cases the uric acid and the non-protein nitrogen are both increased.

In determining renal function blood chemistry has become a valuable aid, to be used in conjunction with the phenolsulphonephthalein test of Geraghty and Rowntree, the test meal for renal function of Mosenthal and Lewis, and Ambard's coefficient or its modification by McLean. The phenolsulphonephthalein test is very reliable but it only shows the eliminating function of the kidney at the time the test is taken. It cannot indicate the retention of nitrogen constituents which may have been accumulating in the blood for some time. That is, blood chemistry shows or rather is a measure of the difference between the nitrogenous elements produced and those eliminated, while the phenolsulphonephthalein test is an indication of the elimination alone.

The renal test meal for kidney function consists of 2 hour collections of the urine during the day while the patient is on a full standard diet, no food or fluid to be taken except at meal times and a 10 or 12 hour specimen collected at night. A normal test should yield a maximum specific gravity of 1018 or more, a variation of at least 9 points between the highest and lowest readings, and the night urine should be of 400 cc. quantity or less and of 1018 specific gravity or more. The NaCl and nitrogen excretion may be studied at the same time.

Ambard's coefficient expresses numerically the relation between the concentration of the urea in the blood and the rate of excretion of urea in the urine. This has been found to be fairly constant in normal individuals and is recorded as 0.08 to 0.09. A rise in this coefficient indicates a renal insufficiency. Some authorities, and these include Folin, are inclined to be rather skeptical of the additional information given by Ambard's coefficient.

Each of these measures has its individual place, each has certain characteristics of value, and from each important deductions may be drawn. If any one process is to be taken as a method of choice to the exclusion of all others, probably blood chemistry will give us the most valuable information.

In the field of surgery, operative risk is largely judged by renal function. The presence of kidney disease as shown by albumin and casts in the urine does not show the true ability of the kidneys to eliminate sufficiently. In urologic surgery, especially in those cases of enlarged prostate in elderly men and in other mechanical obstructions to the out-flow of the



urine, it is of the utmost importance to find out as near as possible the exact functional ability of the kidneys. The prognosis of the case largely depends on this factor.

At the present time not much information of value can be obtained from blood chemistry in acute conditions such as pneumonia and severe febrile conditions. Some slight increase is usually found in some of the non-protein nitrogen factors, but it is probably best to assume that either a toxic nephritis, some previous kidney insufficiency, or an impaired circulation is the cause of the retention and not the disease itself.

In the so-called cardio-renal conditions blood chemistry is proving of considerable value. It is of assistance in differentiating the cardio-vascular with secondary renal involvement from the primary nephritis cases with secondary cardio-vascular conditions. The true cardio-vascular cases show but little retention of the non-protein nitrogen elements in the blood, while in the renal cases a considerable accumulation of one or more of these factors is found. Since the treatment of these two classes of cases is so different, it is of the greatest importance that as exact a differentiation be made between them as is possible.

Chase, in a recent article, has shown that cases of essential hypertension may be differentiated from those cases of chronic nephritis with hypertension by means of blood chemistry. The non-protein nitrogen elements in the blood are much higher in the nephritis cases. As a more favorable prognosis can be made in cases of essential hypertonia, this is an additional valuable point.

In diabetic cases the true condition of the patient, so far as carbohydrate metabolism is concerned, can be more accurately ascertained by estimation of the blood sugar than by the percentage of sugar in the urine. It has been found that hyper-glycemia may exist without glycosuria, also that we may have sugar in the urine and no increase in the blood. This last fact brings up the question of the "renal threshold" for glucose and also the existence of the so-called cases of "renal diabetes." One observer at an army hospital in a recent article states that there are undoubtedly cases which should be classed as renal diabetes. The kidneys appear to be unable to withhold the sugar from coming through into the urine even when the quantity in the blood is well within the normal limits. Whether or not some of these cases ever go on into a true diabetes has not yet been definitely established.

The glucose tolerance of a patient, which is the rise of his blood sugar following the ingestion of 100 gms. of glucose, has been found of

some value in certain conditions. In cases of true, well marked diabetes the blood sugar is found to be higher two hours after the ingestion of the glucose than at the one hour period. This is just the reverse of the condition found in a normal individual. In mild diabetes where the blood sugar is but little above the normal before the test, we find a rise well above that seen in a normal person after the test, and this rise is sustained into the second hour. Some work along this same line has been done in carcinoma cases, but definite deductions cannot yet be made.

It is a well known fact that diabetes may often be complicated with nephritis. It also has been found by blood chemistry that in many cases of severe nephritis there is an increase of sugar in the blood. Whenever an undue amount of sugar appears in the blood and urine of a diabetic, the other blood chemical tests for the non-protein nitrogen elements should be made in order to ascertain if possible the existence of an accompanying nephritis. Often this nephritis may be as much a determining factor in the death of the patient as the diabetes itself.

Considerable attention has been given to the importance of cholesterol in the blood. Gorham and Myers in a series of 200 cases observed a hyper-cholesterol-emia, though not invariably so, in obstructive jaundice, cholelithiasis, arterio-sclerosis, nephritis, diabetes and pregnancy. A low cholesterol content is found in cases of pernicious anemia and the cachexia of malignant tumors. The fact that a small increase has been reported in so many conditions and that so few of the workers agree on these findings has caused Denis to conclude that the cholesterol determination in the blood at the present time at least is of no value in diagnosis or prognosis.

### Conclusions

1. Diagnosis, in general, is impossible from blood chemical tests alone.
2. A high retention of non-protein nitrogen elements in the blood means renal involvement. This is usually in direct ratio with the severity of the lesion. It may be primary or secondary to some other condition, as cardio-vascular disease or diabetes.
3. In early chronic nephritis, which often at first gives only symptoms of gastric disturbance and negative urinary findings, blood chemistry is of value in discovering the presence of the disease.
4. The amount of creatinin in the blood may be used as a valuable prognostic sign in uremia cases.
5. Increased blood sugar is a constant finding in severe nephritis.

6. Cases of essential hypertension may be differentiated from hypertension accompanying chronic nephritis.

7. Primary nephritis cases with secondary cardio-vascular conditions may be differentiated from primary cardio-vascular disease with secondary kidney involvement.

8. Blood chemistry is of great assistance in estimating renal function and is probably the most valuable single method.

9. Persistent high blood sugar suggests diabetes or a diabetic tendency, even when no sugar appears in the urine.

10. Blood chemistry is the most valuable means of discovering cases of renal diabetes.

11. The determination of non-protein nitrogen retention in the blood is a most important aid in estimating the operative risk in a patient and therefore is of prognostic value.

12. It is of special value in this line in genito-urinary surgery.

13. Practically all cases of gout show a uric acid retention in the blood.

14. Non-gouty arthritis cases show a non-protein nitrogen retention as well as an increase in the uric acid.

15. The value of cholesterol determination has not yet been definitely established.

16. Blood chemistry is not at present of much value in acute febrile conditions.

17. By reducing in the food of the patient the precursors of the particular substances found increased in the blood, very good results have been obtained.

18. We must always bear in mind that other factors involving metabolic function are to be considered in making deductions from blood chemical tests.

Wesley Hospital, Oklahoma City.

**Parathesin Not Admitted to N. N. R.** The Council on Pharmacy and Chemistry reports that the local anesthetic ethyl paramino-benzoate was first introduced as "Anesthesin" or "Anaesthesin"; that the product is not patented in the United States, and that it may be manufactured by any firm which chooses to do so. In order that a common name for the drug might be available, the Council coined the short, easily remembered and descriptive name "Benzocaine." As the term "Anesthesin" had become a common name for the drug, the Council also recognized this as a synonym for benzocaine. While the Council had previously recognized the brand of benzocaine manufactured by the H. A. Metz Laboratories, Inc., under the name "Anesthesin," this firm requested recognition of the product as "Parathesin." As the use of one substance under several names causes confusion and retards rational therapeutics, the Council's rules provide against the recognition of proprietary names for nonproprietary, established drugs. For this reason, and because the legitimate interests of the manufacturer may be safeguarded by appending his name or initials to the common name, benzocaine or anesthesin, the Council refused recognition to the designation "Parathesin" (Jour. A. M. A., Nov. 13, 1920, p. 1358).

## PROCEEDINGS OF OKLAHOMA CITY CLINIC, ROUND TABLE, WESLEY HOSPITAL

March, 1921.

**Dr. W. W. Rucks:** *Hyperthyroidism, With Use of Goetsch Test and Glucose Tolerance Determination in Diagnosis.*

Case No. 6701. Female, age 27, housewife, seen November 1, 1920.

Complaint: Nervousness, "nervous chills," loss of weight, profuse sweating, disturbing dreams, rapid and tumultuous heart action, dyspnea on exertion.

Briefed history: Healthy child, had usual diseases incident to childhood. Typhoid fever at 14. Several attacks of tonsillitis. No other sickness until married. Menstrual life began at 15 and was normal until about a year ago when flow became very profuse, but recently flow has become scanty and she goes beyond her regular time. Soon after marriage she became pregnant, and miscarried at third month. She had a second miscarriage, and then a normal labor followed by another miscarriage. For the past 18 months she has been very nervous, which continues to grow worse. She sleeps poorly, has throbbing sensation in her body. Says the rapidity and force of her heart action disturbs her, has rigors which she calls nervous chills. These she has daily, sometimes several a day. The chills are followed by profuse sweating but no fever. About a year ago she consulted a physician who gave her a prescription containing ten grains of bromides to the dose. This she has been taking since with more or less regularity and for the past three months regularly four times a day. She has had several boils on her skin and at time of examination had a rather large one on her left forearm. When she lies with her eyes closed she sees startling and fantastic things, such as automobile accidents and her child being injured, her sleep is disturbed by frightful dreams.

Physical examination: Is much under her ideal weight, is pale, skin is cold, hands wet. Head and neck negative except one devitalized tooth and tonsils which are hypertrophied and infected. Glandular system: mild degree of cervical and epitrochlear adenopathy. Thyroid visually and palpably enlarged. Chest negative except for snappy heart tones, and the heart rate is easily disturbed by exertion or excitement. Pelvic examination negative except for lacerated cervix and retro-displaced uterus. Neurological examination, pronounced tremor of extended hand. Pupils react normally. Reflexes, hyper-active; psychic disturbances and disturbing dreams.

Laboratory findings: Wassermann test negative. Red blood cells 5,150,000. White blood cells 9800. Urinalysis negative.

Course: Patient was kept in hospital for two weeks, under tonic and dietetic treatment. Sodium chlorid being given as a physiological antidote for chronic bromid poisoning. On November 14, 1920, she left hospital and was advised in regard to a period of rest. On February 13, 1921, she returned and while she had improved some, largely I think from discontinuing bromides, she still complained of the nervous tension, tachycardia and weakness. From the beginning the symptoms indicating hyperthyroidism were her most marked manifestations, yet it was deemed proper that she should be relieved of chronic bromid poisoning before final advice was given. On her second admission to the hospital, both the Goetsch adrenalin test and glucose tolerance test were given. The response to the adrenalin was very pronounced, and her glucose tolerance was much diminished. Within an hour after the administration by mouth of 100 grams of glucose, urinalysis showed a gross amount of sugar, and the blood sugar content was markedly raised above the pre-test findings. A control was run at the same time, receiving the same amount of glucose with no change in urine or blood sugar content. A diagnosis of hyperthyroidism was made and a subtotal resection of the gland advised.

**Dr. J. C. Mraz:** *A Case of Bilateral Ureteral Stone Complicated by Bilateral Pyelonephritis, Cholelithiasis and Broad Ligament Cyst.*

Case No. 6686. Patient female, age 36.

Family History: Negative.

Personal History: Two para, labors normal. Children living and well.

Present Illness: Since age of 9 patient has had at irregular intervals attacks of pain of dull aching character in first one and then the other lumbar regions. No radiation or bladder symptoms. Attacks were associated with nausea and occasionally with an irregular fever. Of late has had some pain in region of lower end of ureters on either side. There has been a gradual weight loss of about 20 pounds.

Physical Examination: Somewhat emaciated anemic looking woman. Otherwise negative, except as follows: Moderate tenderness to pressure on either side of lower abdomen in region of ureters. No sensitiveness to pressure on either kidney. Vaginal examination discloses a mass in pelvis apparently occupying normal position of uterus. Uterus in retroversion.

Cystoscopic Findings: Upon inserting cystoscope its tip is obstructed by apparently striking against some mass. Bladder capacity

300 cc. Upon inspection a bulging bladderward of the entire dome of bladder is seen. Mucosa normal. Orifices appear somewhat edematous. Ureters catheterized. Catheters pass into renal pelves.

P. S. P. Test (Intravenous): Left 3 minutes. Right 4 minutes. Left pelvis injected with 12 and right with 25 cc. of sodium bromid solution and pyelograms made.

Roentgenologist's Report: Dilatation of both pelves and ureters more marked on right side. Lying adjacent to shadow, catheters just above bladder on both sides, are seen shadows which because of their smooth oval outline and similarity in size, shape and position, are thought to be artefacts.

Laboratory Report on urines shows pus in mixed and both segregated urines. Cultures show staphylococci.

Clinical Diagnosis: 1. Bilateral pyelonephritis. 2. Fibroma uteri.

Following course decided upon: First—Removal of pelvic tumor because of the possibility of its making pressure on lower ends of ureters, thus interfering with urinary drainage. Second—Treatment of pyelonephritis.

Operative findings: 1. Pelvic tumor proved to be a left intra-ligamentous cyst. 2. Chronic catarrhal appendix. 3. Cholelithiasis (gall bladder packed full of stones). 4. Procidencia uteri.

Operation: 1. Removal of pelvic tumor. 2. Fascial fixation of uterus. 3. Appendectomy. 4. Cholecystectomy.

Convalescence: Uneventful.

Two months after operation patient was cystoscoped, using Kelly cystoscope No. 9, carrying a small wax bulb passed into left ureter for dilatation of stricture if present and for detection of ureteral stone. Renal pelvic lavage with 1-1000 silver nitrate. Upon withdrawal of catheter a deep scratch was found running entire length of wax bulb.

Another x-ray picture was made and the same shadows were found as in the first examination, except that the left one had moved about an inch lower. Bilateral ureteral stone was now definitely diagnosed and the patient was advised to have them removed.

This was done, the left one being removed first because the left kidney was shown to be in comparatively good condition. The right one was removed two and a half months later, after several unsuccessful attempts were made to induce it to pass by dilatation of ureter and injection of olive oil. The reason for its failure to pass was seen at operation as it was found surrounded by dense fibrous tissue so that it could not be moved either up or down. The stones were rough and the size of large olive seeds.



The patient made a smooth operative recovery each time and is still being treated by passage of wax bulbs to dilate the dense fibrous strictures in which the stones were found imbedded and for purpose of renal lavage. The patient is gaining rapidly and steadily and the amount of pus in the urine is steadily decreasing.

This case presents several points of interest: First: In spite of the long duration of the infection, 27 years, and with considerable dilatation of ureters and pelvis, the functional activity of the kidneys is still fairly good as shown by the phenolsulphonephthalein test, and blood chemistry.

Second: The association of ureteral stone and gall stones, both probably secondary to the same infective agent.

Third: Bilateral ureteral stone is a rare condition. The Mayo Clinic reports four cases of bilateral stone in a series of 500 cases of ureteral stones.

Fourth: The case demonstrates the value of the waxed ureteral catheter in diagnosing some obscure cases of ureteral stone.

**Dr. J. C. Macdonald:** *Posterior Orbital Hemorrhage.*

Baby, eight days old, brought in because of exophthalmos of left eye and hematoma over left temporal region.

On day following birth the left eye began to bulge and a small tumor appeared over left temporal region. This condition has gradually become worse. The baby has rested well and apparently had no fever.

Examination shows marked exophthalmos of left eye with slight haziness of cornea. There is a tumor over left temporal region which fluctuates on touch. Temperature is normal.

Operation: An incision was made over hematoma and slight amount of blood evacuated. On passing a probe down through frontal sphenoidal suture back of the orbit, a considerable quantity of dark red blood was evacuated.

The following day the exophthalmos was slightly less and it was hoped the eye could be saved. Two days later, however, a panophthalmitis and hypopyon were present and an enucleation was done.

Convalescence was uneventful.

While the etiology of this condition is not clear, it was evidently due to injury at delivery. The enucleation was done when it was apparent that the eye could not be saved, also to prevent sympathetic ophthalmitis of other eye.

**Dr. A. L. Blesh:** *Cholecystitis, Acute Suppurative.*

During the last two years we have had almost 100 cases of acute suppurative cholecystitis in the surgical service at Wesley

Hospital. At the present time there are two cases convalescing, the one operated by Dr. Stout, the other by me. These cases are of great interest to me, for the reason that since 1919 we have treated them radically different.

Prior to 1919 we treated them by drainage as advised in most of the large clinics, and in all of the standard text books. Our mortality under this treatment was twice what it now is, convalescence was much more tedious, morbidity was greater, and very often the necessity for a secondary operation was imperative.

In the last series of 100 cases of acute suppurative cholecystitis (phlegmon, gangrene, etc.) we have unhesitatingly done an extirpation of the gall bladder. The records show a mortality of one per cent, or if perforation of the gall bladder with ensuing peritonitis is included, two per cent, one of each class having died. Of course the perforating cases with peritonitis are much fewer in number and I do not wish to be understood as meaning the mortality figure of two per cent to stand for perforating cholecystitis with peritonitis. The smoothness of convalescence as compared to the former series in which cholecystostomy was done has been the striking feature in the cases. Also the freedom from post-operative morbidity has been most marked and the patient has not carried with him the dread of another operation.

The operation itself is not especially difficult, but it should be borne in mind that the technique best adapted to the removal of a thick swollen friable gall bladder is to work from the fundus toward the cervix and not from the cervix toward the fundus. The latter is the ideal way to do a cholecystectomy in an elastic gall bladder.

The patients have been among the most grateful that we have had, and it has been no uncommon thing for them to give expression to their relief when they awaken from the gas, while yet in the operating room.

**Dr. D. D. Paulus:** *Angina Pectoris.*

Patient, male, age 37, occupation shoe salesman. Family history not obtained. Has had no sickness since childhood.

Present complaint: 2 hours ago had sudden severe pain over chest, cardiac region. Pain radiated to neck. Pain was severe enough to cause patient to cease all movement or muscular effort. This pain continued and patient was sent to hospital. No constricting sensation of chest or heart.

Examination: Shows well developed, well nourished middle age man apparently in considerable distress. No cyanosis. Pupils equal and react promptly to light and accommodation. Throat negative. Glandular system negative. Chest negative. Heart, left border

three-fourths inch beyond nipple line. Heart sounds normal. Slight hyper-aglesia of cardiac region. Blood pressure 140-70, pulse 72. Abdomen and extremities negative. Reflexus O. K. Urine analysis: Specific gravity 1030, alkaline reaction. Albumen, faint trace. Microscopical, a few hyaline casts. Wassermann negative.

The next day patient still had some pain over cardiac area, but not very severe. Auscultation showed a distinct diastolic murmur over base, with a slight systolic murmur heard over aortic area. A fluoroscopic examination at this time showed a left side preponderance with moderately dilated aorta. On the third day patient stated that pain was practically gone, although he felt quite weak and tired. From that time patient improved rapidly until he left the hospital.

The ultimate prognosis in this case is grave as we have an aortic lesion with a rather typical attack of angina pectoris. No doubt the lesion in the aorta is of the progressive type and his angina attacks will increase in frequency as time goes on. This patient probably has sclerotic patches both in his coronary arteries and his aorta, even though his blood pressure is not particularly high. The question of syphilis in a case of this kind has to be considered because syphilitic aortitis is a common lesion of the aorta. His negative history to venereal infection, the negative finding of his glandular system with negative Wassermann, seem to disprove this. We should always remember though that syphilitic aortitis may occur even in young men and is usually a grave symptom, because of its progressive character.

Recently we have had a number of marked angina pectoris cases without visible myocardial inefficiency, and a normal or even low blood pressure. This, however, does not disprove a localized sclerosis of coronary vessels, which is a rather common finding in angina pectoris, although not always present.

### TUMORS OF THE BREASTS DISAPPEARING UNDER X-RAY EXPOSURE.\*

A. RAY WILEY, M. D.  
TULSA, OKLAHOMA

*Case History:* Mrs. R. E. S. came to my office March 9, 1921. Her chief complaint was tumors of both breasts. She gave the following history: both parents living and in good health. Has no brothers nor sisters. There is no family history of malignancy.

*Personal history:* No illness in her life until she had influenza in 1918. Menstruated at 13 years of age, regular, but had dysmenorrhea from 13 to 17 years of age. Married at

20, and is now 28 years old. She has never been pregnant.

First noticed a "lump" or tumor in left breast 4 years ago. Later, noticed other tumors in the same and also in the other breast. From time to time she has noticed that there has been a slight change in the size of the tumors, both of increase and of decrease, but they have always been present since first noticed. Breasts are tender at menstruation time, but no more so than before she noticed the tumors, and the tenderness is not in the tumors. There never has been any discharge from either nipple, of any character. The breasts are of normal size, and of flaccid type. There are four distinct tumors in the left breast, and three in the right. The largest is the size of a pecan or small walnut and is located 1 1-2 inches to right of left nipple. The tumors are freely movable, firm to the touch, and not tender.

Examination of the rest of the body shows: head normal except hypertrophied tonsils and a slight enlargement of the isthmus of the thyroid. The lungs and heart are normal; abdomen normal. The reproductive organs are normal except slight endocervicitis. A blood Wassermann was taken which was reported negative throughout. A urine analysis, by the same laboratory, was reported to be normal.

A presumptive diagnosis of benign multiple fibroids was made. She was ordered to the hospital the next day for x-ray. She was fluoroscoped for any lesion of the chest. There was none found. She was then given x-ray exposures over the breasts in four different areas, using 8 in. spark gap, 4 millimeters, filtered through 4 millimeters of aluminum and one millimeter of sole leather, with three minutes to each exposure.

She was then ordered to report in ten days for operation for the removal of one of the tumors under local anesthetic for a complete diagnosis as to the pathology of the tumors. The idea of giving a preoperative x-ray was to lessen the danger of producing an early metastasis in event the tumor removed for section should be cancerous. This is a precaution that should be taken where one has access to the x-ray but not to the frozen section facilities.

She reported on time and was taken to the operating room. Then, to my amazement, no tumors could be found. Fortunately this was discovered before any anesthesia or operative work was started. I called in Dr. Lhevine, as he had examined her at the time of the x-ray and had given her the x-ray exposures. Neither could he, now, find any tumors. I examined her four days later with same results.

She was given K. I. ten minims T. I. D. and ordered to report in one month.

\*Read before the Tulsa County Medical Society, March 28, 1921.

# THE JOURNAL

OF THE

## Oklahoma State Medical Association

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Articles sent this Journal for publication and all those read at the annual meetings of the State Association are the sole property of this Journal. The Journal relies on each individual contributor's strict adherence to this well-known rule of medical journalism. In the event an article sent this Journal for publication is published before appearance in the Journal, the manuscript will be returned to the writer.

Failure to receive the Journal should call for immediate notification of the editor, 508 Barnes Building, Muskogee, Okla.

Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

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### EDITORIAL

#### WHY MORE "PREVENTIVE" CAMPAIGNS?

"Anti-Fly Campaign of 1921" and "Bath-tubs and Progress" have recently reached our office; the former a free circulating, altruistic sheet, with apparently none but the purest motives born of the desire to aid the unthinking, unwary citizen of possible danger and destruction from a lightly regarded source; the latter a concise resume of the evolution of the bath, noting former criticism of such "foolish" innovations, its slow progress in the face of ignorance and opposition from those, who like the obstructionist of today, either knew nothing of the matter or twisted their supposed "constitutional or religious bigotry" into remarkable protest.

Such propaganda is very familiar to all physicians, his profession, the originator, active and unpaid disseminator of that and every other measure of prevention and control, as far as is known, of preventable disease. However, there is a remarkable, unwarranted and highly irritating side to all such activity—

and that is the invariable charge of self interest, selfish motive and some mysterious end, the method never explained by the critic—by which our interest is given the lowest possible interpretation. Whether in Oklahoma any other state or at Washington, with little change as the years go on, is to be found in unreasonable, fanatical opposition, the Christian Scientist, every "off-color" school of medicine, and, incongruous as it may seem, immense National patent medicine interests before legislative committee hearings everywhere, charging that the medical profession, by some hook or crook seeks, regardless of the measure being considered, to imperil the rights, lives, happiness and comfort of the people. Recently the bill providing for instillation of silver nitrate in the eyes of the newborn babes, fell a victim to this foolishness, the gentleman from Muskogee County insisting that the law except those having "religious" scruples against harmless application of a simple drug, but one powerfully potent as almost certainly preventive of blindness due to gonorrhoeal infection. Incidentally it is not out of place here to note the reason given by an editorial writer in the *Tulsa World*, for caustic opposition to the measure being enacted in any form. He states his case briefly, but effectively: "I employ the best physician I can get to look after my family, I expect him to do the best under all circumstances. Why should I have to 'legislate' into him a step well known to the scientific world as the thing to do?" Certainly there is logic in that position. Certainly any physician neglecting that procedure at birth of any child, rightly faces just charge of inexcusable malpractice. Yet with this fact well known, we find our time-wasting, so-called representatives, haggling over legally written exceptions, sanctioning the most dangerous neglect to the most helpless of humanity. This same "conscientious objector" is the same found objecting to compulsory baths in schools of more than two hundred pupils. The doctor, of course, as do all decent people, recognizes the good sense, as well as the apparent need for such, for he knows that not all parents are punctilious over such attentions to their children, that dirty children are dangerous to all other children, that a bath could do them no possible harm and that the habit of cleanliness inculcated at the ages of school life would be of vast benefit eventually in lessening disease. Regardless of all these generally accepted facts the human intelligence is humiliated by having to enact a half-effective piece of legislation simply because a small, fanatical minority of our people twist the unreason into alleged belief that their rights are endangered. Certainly the world has never witnessed so much



foolishness in a day when we are supposed to be modern and mindful of the lessons of past experience and knowledge.

Our concern lies in the continued questioning of the motives of an honorable profession. If there were anywhere, in the past activities or policies of our profession, an instance of the doctor en masse suggesting any procedure to the people by which it could be shown remotely possible results brought personal gain, no man would object to the closest investigation. On the other hand every worthy move of the past tending to and actually lessening morbidity has sprung from the researches of the doctor. This stands unchallenged since time made record of performances of man. Many diseases, formerly death's great aid, are now under control wherever the intelligence of people permits them to accept free advice from the doctor. Volumes may be written recording past great achievements and sure evolution of the hopeless into hope; the world's pest holes have been eradicated and made safe; by whom? The Christian Scientist's fanatical appeal? His obstruction of everything? If his path only brought injury to himself, we would have little to say, but we have too much of the untreated, preventable death among him. If his willingness to accept dangerous infection could be hedged so the innocent were not called to account for his foolishness, we would have nothing to say, but his destruction cannot be calculated. The entire performance is becoming so monotonously tiresome, that there is some justification in the growing tendency among individuals to alter our policies, to attend to our own business and let the dear people have the result, whatever it may be. This sounds inhuman, but if the medical profession could suddenly be brought to that united plan of action by which he kept his counsel, his knowledge of the ease of prevention, instead of being widely heralded, without the slightest return compensation, not even gratitude, entirely within his selfish self, then, indeed, we would observe in a few short weeks a different attitude. No doubt we would have repeated in a few days, the same frantic appeal, not yet forgotten, when the country found itself at war. The age limit would not be mentioned, the doctor's family would again be called to share his sacrifices, and, like the kind asses we are, the call would be answered. We predict that on the day of arrival of typhus in Oklahoma the bath will suddenly become a popular institution. On that day our ever-present obstructionist, the Christian Scientist, will have his inning, but it will be at the bath tub, under supervision of a "Healer?"—no, a "Regular" doctor will be master of the bath.

## AGAIN THE TAILENDER.

We have him with us always, always the same fellow. Our records show that for years the same laggard doctor is found in that small file of "left-overs," his membership lapsed, his name a liability instead of an asset, simply because he lacks that small bit of cooperation to make his membership worth while instead of a costly piece of worry. He should appreciate that he does not pay the cost either, except he suddenly looks up and sees the deputy sheriff handing him a scrap of paper, technically called a "summons," which means he will now ornament the hot griddle of a legal hovel for days more or less. Then, and then only, he sees the point, manages to become indignant, even enlisting his friends in criticism of the "neglect" he has received. We recall one who seduced his county secretary into writing "He is all right, always been a member, it seems he ought to have defense." He did not get it.

The McAlester meeting should certainly write into our regulations a small clause demanding a penalty of no small proportions, as a necessity for renewal of membership, after it is allowed to lapse in the face of repeated notice. As the matter stands, the most troublesome, difficult work, requiring painstaking checking of records and transfer, is the task handed our office by this minority. Inasmuch as it is always the same fellow, he should be a good sport and not dance without paying the fiddler.

## ETHICS.

As old as medicine, the first thought of Hippocrates, drilled into every medical student, still we are constantly transcending its bounds of decency. The thing we do not like about it is being called to "interpret" the law. Annually, at least a bushel of papers sift into the Secretary's office, some signed, some anonymous, but all having for object direct invitation for the Secretary's office to regulate the offender. Now be it understood, the Secretary is not a Czar, has no power of injunction, and finds by sad experience that the position of referee is hard and thankless, even advice—we do not undertake to say it is very good—solicited, surely has its reward in enmity as often as otherwise.

Ethics means nothing more or less than the Golden Rule. No Oklahoma physician needs to be told that his actions are improper, not in keeping with the rule of customary, accepted behaviour. Every one open to criticism knows very well that he is doing wrong. Shifty excuses in attempts at explanation and avoidance of clear responsibility are unworthy and

fool no one, neither do they excuse or undo the wrong. No honest man can look his fellow doctor in the face if he is committing wrong in ethical matters.

The kernel of the matter might be arrived at by the House of Delegates at McAlester by a brief declaration of principles once more for the benefit of those who pretend they are at a loss as to the proper course. We suggest that the matters listed below might be given clarity, eventually called to the attention of all of us.

Dr. .... has been quite busy this week. In one day he met the stork at Bill Jones, then rapidly "flivvered" over to Tom Brown's, barely defeating the stork in that race, and hardly had his boots struck the floor until he had to lift his tired overworked frame into the "flivver" again and deliver little Sue Ann Smitty, 12 pounds, into the hands of the proud father.—(*Any Old Weekly*).

"Well I'll tell you, a fellow just has to do it. That fellow (Dr. ....), up at ....., gives them 50% for surgical cases; it's funny too, he used to just give 25%, but Dr. .... over at ..... got to giving them 50% and was taking all his 'business,' so he just naturally raised the ante. Another thing about it too, Dr. .... is a member of the American College and they say they do not take 'that kind of members.' Now when a member of the American College does those things what else can we do?" Answer: Go out and steal a horse or automobile; it is being done quite regularly. (We have wondered what effect would result from adoption of a standard receipt to be given by every operator to his patient, reading "Received of ..... \$150.00 in full for operation and care of wife, \$75.00 of the above amount, it is mutually understood, is to be paid Dr. ...., family physician of ....., referring the case.")

Consultation with "so and so," osteopaths, etc. What shall we do about it? Some localities are not quite certain. Incidentally advices have been received that some of our "Regulars" are not averse at all to colloquing with the Chiro. Where do we go from here, hoys?

"This suit was 'ribbed' up by men right in my own town," Dr. .... advised the plaintiff and his lawyer, even went into court and "swore so and so." (This is identical with pouring oil on one side of the house and water on the other, for fire control. Every doctor is assailed, if he only had sense enough to see it, in practically every suit. We should either stop that foolishness or abandon defense.)

Chiropractic leaders announced immediately after passage of their separate hoard law that administration of drugs by any Chiropractic would call for immediate prosecution of the offender and revocation of his license. It should be noted as significant that the other system of "Drugless Healers," the Osteopaths, are clamoring with all their might for legal permission to administer drugs, etc. The remarkable thing about the whole matter is the inconsistency of the 8th Legislature in legalizing one set of "Manipulators," and in the same breath legalizing the hybrid creation, now existing, half osteopath, the other half poorly trained, inadequately instructed drug administrators, or at least those claiming such opposing abilities.

We cannot say "Selah" here.

## THE EIGHTH LEGISLATURE AND MEDICAL LEGISLATION

The session of the 8th legislature goes into the discard as having enacted more legislation

affecting the science of medicine, healing and the public health than any predecessor in our history. Briefly this body, in its wisdom, saw fit to do the following:

Create a separate board for the Chiropractics.

Create a separate board for the Osteopaths.

Enact requirement that newborn children should receive immediate instillation of 1% silver solution in the eyes, excepting those objecting by reason of religious scruples.

Refused to pass law for examination of cooks, waiters and food handlers to determine freedom from venereal infection. Likewise rejecting provision for establishment of baths in schools with more than two hundred pupils. This latter, also killed by Christian Scientist objections.

Cut every appropriation proposing maintenance of public health agencies to the limit of the ridiculous.

Booted every soldier relief proposition over the field, in the end doing nothing, aside from purchasing makeshifts as a salve to the ill and wounded soldier.

Without question the session will go into just oblivion as having no idea of its duties and obligations to the people of Oklahoma insofar as the above matters are concerned.

## A STATEMENT TO OUR MEMBERSHIP.

As a matter of personal privilege the Secretary-Treasurer-Editor takes this occasion to briefly state certain facts surrounding legislative and other activities, which, in some sections of the State seem to be either wholly misunderstood, inexcusably misinterpreted, possibly, given such interpretation without any information upon the matter or refusal to recall very distinct attitudes of their membership from time to time as the urgency of the matter has been called to their attention.

Inspection of past issues of the JOURNAL, with circular and personal letters will disclose that the continuous warning from this office at every opportunity, was that Senate Bill 111 was the best obtainable from the standpoint of proper regulation of scientific medicine, while its composite membership character was open to grave questioning, the concensus of opinion, *not of Oklahoma*, but overwhelmingly of other states having the problem, was that that course was the best compromise. The advices constantly warned that every *member, county organization and state*, must not accept the matter lightly, that the doctor only could direct sensible opinion, that he must individually do that

Lack of cooperation was evident at all times,

but it was especially so in those centers piling up the huge majorities against the Law. Vivid memory justifies, as now unwarranted criticism of the handling of the matter comes from that county, the reminder that long ago, when the matter was presented to the society in question, the effort for unity was met, as reported, "With the 'Horse Laugh'." In that county the officers not only neglected to report a legislative committee, but one had finally to be arbitrarily named and solicited personally to act, appreciation of the matter was voiced, in the now well remembered reply of the "drafted" chairman, "I take no interest in politics." Here it must be suggested that doctors do take an interest in "politics," which is only the science of government, certainly a function of all intelligent citizens, if the best government is to prevail.

This county, overwhelmingly Republican, now criticizes the efforts of Representative Sharp, Republican, Logan County, impossibly attempting to associate his actions with the writer. They are to be assured that I did not send Dr. Sharp to the Legislature, nor did I suggest to him his suggestion to the House, that boric acid be substituted for Silver Nitrate in treating newborn's eyes. They are to further definitely understand that this office took no step without first consulting every one thought to have ideas of merit and assistance, and that often no aid came from those sources, not even replies. In the end they must understand, however, that their stands at the head of obstructionists and non-cooperators. This fact is painfully evident from the preserved files of the years of wasted work expended futilely.

Criticism is the very finest stimulant known to produce the best efforts of men, but when made in bad faith, when made in attempt to shirk responsibilities, when it attempts to explain humiliating results over which the criticized had no possible control, then it becomes mere dishonesty. It is also significant that none of such criticism comes from the few counties defeating the Referendum, but the most comes from the county piling up the largest Chiropractic majority; it lessens in exact ratio with the falling pro-Chiro. vote.

Later, when your secretary suggested to a boyhood senator friend that he consult the good physicians of his counties before finally deciding his position upon such a technical matter; he did that very thing, wrote all of them. *For reply he received not one letter*; this too, after the writer had personally called that county and asked that they immediately co-operate in the matter. Multiplication of these facts are too humiliating and exasperating for further waste of time. Oklahoma acted

throughout exactly contrary to the action of other states.

The reader of this is to emphatically understand once and for all that personally the writer is only seeking to follow the best course, that whatever a sensible majority directs as the best action will be followed. He is to understand, too, that nothing is more destructive to the personal interests of the writer than these labors calling for total abandonment of his own affairs.

### *Abstracts, Observations from Current Medical Literature*

CONDUCTED BY

RADIOLOGY AND DERMATOLOGY—Dr. Chas. H. Ball, Daniels Bldg., Tulsa.

GENERAL SURGERY—Dr. M. E. Stout, Patterson Bldg., Oklahoma City.

ORTHOPAEDICS—Dr. Earl D. McBride, 208 Coleord Bldg., Oklahoma City.

EYE, EAR, NOSE AND THROAT—Dr. L. C. Kuyrkendall, McAlester.

GENERAL—INDUSTRIAL MEDICINE—PUBLIC HEALTH—Dr. L. A. Mitchell, Frederick; Dr. J. L. Austin, Durant.

#### **EYE, EAR, NOSE AND THROAT**

L. C. Kuyrkendall, M. D., McAlester

#### **ETIOLOGY OF DEVIATIONS OF THE NASAL SEPTUM: ANATOMIC THEORY**

William Spielberg, M. D., New York, *Journal A. M. A.*, December 11, 1920, Vol. 75, No. 24.

The writer names the different theories advanced up to the present time and those usually accepted, viz.: The Talbot, stigma of degeneracy, the Trendelenburg and Freeman of persistent high arch of the palate crowding the vomer, and the Bosworth, that of traumatism, then gives his theory which is as follows:

"The Nasal Septum divides the bony structure into two compartments. It is surrounded by hard, unyielding, bony tissue which begin to ossify from the first to eighth week of gestation. The septum composed of the vomer, perpendicular plate of the ethmoid and triangular cartilage, ossifies so far as the bony portion is concerned, from the second year to puberty. Of course the cartilage remains soft throughout life.

"It is easily conceived, therefore, that the surrounding bony structures, ossifying at a much earlier period than the bony septum, will cause the septal constituents to deflect or deviate in order to permit it to occupy its proper place. It is as if one should attempt to insert a paper perpendicularly into a box of smaller dimensions. The paper would, of course, assume the form of an S or bend out with concavo-convex configuration."

#### **A RAPID CULTURAL METHOD OF DIAGNOSING DIPHTHERIA**

W. D. Frost, Ph. D., Alice M. Charlton, M. S., Madison, Wis., and Mary F. Little, *Journal A. M. A.*

In this article the authors give you a beautiful and lurid description of their rapid Cultural Method of diagnosing diphtheria, but to the average eye, ear, nose and throat man as well as the general practitioner, it is of no benefit in that it would involve the equipping and maintaining of a laboratory or else the sending away to the city of the specimen, and the time element would not be re-



duced thereby. Their technique is beautifully written but not applicable, practicable or even possible of adoption by the profession at large.

### Editorial Notes—Personal and General

#### DOCTOR JAMES PORTER McRAE

Dr. James P. McRae, Coalgate, died March 8th at that place after a brief illness following operation for peritonitis incident to appendicitis. Dr. McRae was born in Knox County, Mo., October 19, 1870, receiving his medical education at Keokuk Medical College. He is survived by a wife and several brothers and sisters. Interment was made at Coalgate.

#### In Memory of Dr. J. P. McRae

Coalgate, Okla., March 16, 1921.

Whereas, it has been the will of the Great Spirit to remove from our midst, one of our professional and one of our best citizens, be it resolved, we mourn his early demise and extend our heartfelt sympathy to his family and relatives, and yet we humbly bow to the will of our God, the author and finisher of our faith.

When the dearest friend has departed  
We would speak kind words to the broken hearted,  
We know that as we travel the road that he has trod  
We too 'ere long will be called home to our God.  
Dear friend, as we stand and look on your lifeless form

We realize that you have passed through life's great storm,

You have fought the good fight, you have won  
And now we know your cares and toils are done.  
The Death Angel has brought us sorrow and pain  
Yet we know, dear friend, our loss is your gain.  
Oh God, precious Savior divine  
Help us to give him up, he is Thine.

It is not all of life to live, or all of death to die  
There is a mansion prepared for us beyond the skies.

Let us take courage, live in devotion and prayer  
And meet this dear friend over there. —F. B.

By Coal County Medical Society.

Dr. I. B. Oldham, Muskogee, visited Alabama in March.

The Oklahoma Methodist Hospital, Guthrie, proposes erection of a training school building for nurses with capacity of from 20 to 50 beds.

Dr. T. J. Gipson, Lawton, is acting the part of the "worm" which turns. A few hours after a reckless driver wrecked his car Dr. Gipson filed suit for \$1,200 damages.

Waukegan's (Ill.) "Chattering Child," eight-year old Miriam Rubin, whose phenomenal cure of her attack of "Talking sickness" by Chiropractic adjustments, which was widely heralded by news dispatches, it seems is not quite "cured" yet, though the "Chiro" faithfully adjusted her little spinal column from February 12 to February 23, at which time he was dismissed by the parents, who stated no material improvement had resulted, also illuminating the situation by explaining that they had received letters from various sources, finally a telegram suggesting Chiropractic treatments, which were tried. Also stating that the "Chiro," after seeing the child, said: "I know what is

the matter with your child, I can cure her." No less authorities than Drs. Isaac A. Abt and Robert Preble, Chicago, saw the case in consultations, all agreeing that it was a case of encephalitis with unusual symptoms of excitation. The child did not talk incessantly, but intermittently. Complete results of an investigation conducted by the American Medical Association may be noted in March 5th issue. Unfounded claims of "cure" by the Chiropractic is not unfamiliar to the busy physician; their claims rank almost with those of the Scientist in their improbability, when the rules of scientific knowledge are applied and usually investigation discloses just such *faux pas* as in this case. The significant thing, however, over which one may ponder, is the total inability of the sensational press to undo the damage they have done, even if they had inclination. The truism, "Fools rush in where angels fear to tread," is again exemplified.

### MISCELLANEOUS

#### WISCONSIN HOME-COMING

The State Medical Society of Wisconsin will celebrate its seventy-fifth birthday by holding a "Home-Coming" meeting in Milwaukee, September 7, 8 and 9, 1921. All former Wisconsin men, whether they have practiced there or left Wisconsin to study medicine, practicing elsewhere after graduating, are invited to this home-coming.

The officers of the society are anxious to secure at this time for mailing purposes the names of all former Wisconsin men. They will confer a favor by sending their names and addresses to Dr. Rock Sleyster, Secretary, Wauwatosa, Wisconsin.

#### THE ROMANCE OF ADRENALIN

An old adage says that "Truth is stranger than fiction." Has the reader ever stood near one of our great railway arteries watching the passage of a heavily laden cattle train? Has he observed how closely the animals, about twenty in all, are packed into each car? A train-load of sixty cars, 2400 feet long, carries 1200 cattle; and nine such trains, about four miles long, are required to transport 10,800 animals.

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In some respects Adrenalin is the most wonderful and interesting endocrine product now known. Its action is virtually instantaneous and dramatic. It blanches tissue as no other substance does. It controls capillary bleeding, cuts short the paroxysm of asthma, supports the heart and circulation when depressed, reinforces the action of local anesthetics and makes it possible to do with less of them. It is a valuable test for certain obscure pathologic conditions, as latent hyperthyroidism.

Parke, Davis & Co. publish attractive literature on Adrenalin for gratuitous distribution to physicians. Write to them for a supply, and after reading it file it for future reference.

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### THE ANTE-PARTUM OBSTETRICAL EXAMINATION\*

ROBERT E. LOONEY, M. D.  
OKLAHOMA CITY, OKLA.

Attention is called to the fact that this paper is not intended to cover the thorough and careful physical examination which is to be desired in connection with every obstetrical case we handle, but the purpose is to emphasize the importance and purposes as to the value of an obstetrical examination for every expectant mother.

We should realize that obstetrics of today, as taught and practiced in the fullest interest of all concerned, constitutes more than the services of the medical attendant begun at the onset of labor and ending with the delivery of the placenta.

Practical application has long since proven in dealing with the sick, abnormal, exposed, and dangerous, that it is safer, easier, cheaper, and better to prevent than cure disease, and to this the art and science of obstetrics is no exception. It is very important to remember that motherhood in its entirety exacts the most severe tests of woman's physical, mental and nervous make-up. It is also imperative to know that pregnancy fails to furnish immunity from any disease, augments all pre-existing maladies, renders woman more susceptible to many general disorders, complicates and endangers intercurrent diseases and intensifies all local affections. In view of these facts, the prospective mother, in placing herself under the protection of her attendant, should receive a thorough physical and obstetrical examination. The tragedies met with in obstetrical work call for the exercise of every possible safeguard to eliminate or diminish the danger incident to the accomplishment of maternity. That every available factor for the safety of the childbearing woman be speedily and faithfully enlisted would seem imperative when we are confronted with the humiliating statement that among governmental records compiled from sixteen enlightened nations, the United States stands fourteenth in mortality due to childbirth and its complications.

Practical experience of those engaged in

obstetrics as a specialty demonstrates that approximately thirty percent of pregnancies are in some degree abnormal. This danger is manifest by the slightest degree of ill health or represented by the most vicious gestation or internal pathology. From some late statistics it is noted that nine percent of all prospective mothers possess some degree of pelvic contraction.

The annual number of utero-gestations in the United States is approximately 2,650,000 (Ritter). Out of this number 15,000 mothers are lost and additional thousands left with impaired health due to accompanying accidents and complications. 150,000 mothers give birth to full term dead babies.

Even before the first manual on childbirth was published at Strasbourg in 1513, no doubt occasional apparent deformities led to ante-partum examinations, but even until today the practice of making these routine examinations is shamefully neglected by the average man who assumes the care of women in childbirth. The long strides made in the departments of medicine and surgery has not been applied to the department of obstetrics, which is in reality a branch of surgery.

Little is written, comparatively, upon the necessity for or the advantages gained by a routine ante-partum examination of the prospective mother, and yet the possible hazards incurred by the woman and the child in the process of labor are indeed many and varied - probably not until obstetrical surgery has become a specialty will our women receive the exact and painstaking ante-partum examinations to which they are so much entitled. It is doubtful if the average general practitioner who also "attends" confinement cases, will ever give the matter of routine ante-partum obstetric examination the consideration which it must demand if *that* branch of surgery keeps pace with all other departments of preventive medicine and surgery. We frankly say then that the reason for this routine practice is "that it may reveal many conditions which are amenable to correction or curative treatment."

The anxiety as to the outcome of the ordinary case of child-birth is so manifest on the part of the expectant mother (and all the relatives) that it is a great wonder that we have not long

\*Read in Section on Pediatrics and Obstetrics, Annual Meeting, Oklahoma City, May, 1920.



ago gone into the detail examination of the patient from the obstetrical viewpoint in order to give the case the best prognosis possible.

No one could take exception to the statement that every man who assumes the responsibility of caring for a woman in labor should inform himself, before labor begins, as to whether there is anything in the condition of the mother or child that may delay or complicate the process. This can only be done except by actual examination.

The prophylactic value of such examination is very great, and he who intends to do obstetrical work should embrace every opportunity to perfect himself in this procedure. Besides revealing many conditions which are amenable to correction or curative treatment, it often serves to make an examination early in labor quite superfluous, thus lessening the danger of infection from an examination which would otherwise be required. As an example of this, take any primipara, the ante-partum examination of whom has shown that there is no contraction of the pelvis, that the head is in the pelvic cavity, and that everything else is as it should be, then if the patient is attended by a good nurse, who reports that the "pains" resemble those of the first stage of labor, there is obviously no occasion for haste in examination or any necessity for internal manipulation. I think the importance of this work is indeed too greatly underestimated and that we should spend much more time in the physical diagnosis of pregnancy and the actual ante-partum obstetrical findings in all the cases which come under our care and direction.

In taking up this important subject at this particular time it is not our purpose to go too minutely into the detail technique of the obstetrical examination, but more to emphasize the importance of a step in the practice of obstetrics which has not always received the attention it deserves and which has not been made the routine in the management of cases in private practice as well as those in clinics and hospital practice.

Argument in favor of a routine ante-partum obstetrical examination in all cases is found in examples as follows: The patient may be the subject of pelvic contraction sufficient to cause serious dystocia, and yet she may present no noticeable deformity whatever. Under the routine examination the condition is recognized in time that a premature labor may be induced, or arrangements made to operate early in labor, before exhaustion or possible infection makes cesarean section more than usually hazardous. So also many other conditions may be recognized as follows: Malpositions and malpresentations; unusual size of the fetus; placenta praevia; tumors obstructing

the delivery; multiple pregnancies; and venereal diseases with their accompanying danger of maternal infection and fetal ophthalmia. This routine ante-partum examination deserves separate and careful consideration, because its importance is twofold; it safeguards the patient against many dangers and it familiarizes the physician with external diagnosis of position and presentation.

The act of reproduction is primarily a normal and physiological procedure and the profession, as a whole, has failed to seriously consider the degree of danger and the obstetrical disqualifications imposed upon the present and potential mother, preferring to consider all pregnant women normal unless some danger signal announces her otherwise. A safer and more rational procedure for the mother and unborn child would be to consider every pregnant woman obstetrically abnormal until she is proven normal by the most careful obstetrical examination.

### Time

When should this examination be made? If only one ante-partum examination is done, it would preferably be made at about the thirty-fifth week of gestation, because at this time the fetal outlines are much more easily made out and position and presentation accurately determined. However, an examination at about seven or seven and one-half months is to be desired because at this time it is not too late for the induction of premature labor, if this should be found advisable. The pelvic measurements should be made at the earliest examination so that the pelvic capacity may be at once determined; unless some complication is discovered, a single examination will suffice—although an external examination after the time of "lightening," or a week before delivery, is highly desirable in order to confirm the position and presentation, and besides in the case of primipara it is important to determine whether the head has entered the pelvic cavity.

### Technique

The patient should be in the dorsal position, preferably upon a firm table, with the knees moderately flexed and the head and shoulders slightly raised. This affords the greatest relaxation of the abdominal muscles. The bladder and bowels should be empty. Corsets should be removed and the clothing so arranged that the abdomen can be completely exposed. The object of this examination and its importance should be explained to the patient and usually she can be truthfully told that it will be attended by little or no pain, and in this way you get satisfactory abdominal relaxation and the interested cooperation of the patient.

These examinations should not necessarily take any great length of time. On inspection the practised eye takes note of many things in rapid succession. Usually the size of the abdomen suggests a contracted pelvis, hydromnion, twin pregnancy, or a very large fetus. The fact that in transverse positions the long axis of the uterus is transverse may be instantly noted by the eye and all at the same time the fetal movements may be observed through the abdominal wall. The presence and extent of abdominal scars call your attention to past operations to which the patient has been subjected. Palpation of the abdomen should be conducted systematically and carefully. The external examination should always precede the internal.

### Examination

The internal serving as a supplementary procedure and to confirm the external findings. In many cases the satisfactory information gained from external examination makes the internal examination unnecessary. By using the tips of the fingers with gentle manipulation one may gain all the information possible without exciting the patient to involuntary resistance or without causing any pain or annoyance whatsoever; by locating the fundus and noting its height you are able to estimate the probable period of pregnancy. You should next locate the head. If the examiner knows the position of the head, there should be little difficulty in determining that of the breech. As we have already observed, the uterus will lie slightly in a position of right or left obliquity. Correct this by gently pushing the fundus to the medium line. In this medium line position the uterus will appear to rise higher in the abdominal cavity, denoting that the pregnancy is further advanced than at first supposed. You will next determine the long axis of the fetus and thus making sure that you are not overlooking a transverse position.

This step has probably already been determined from the first glance of the experienced eye and palpation for this purpose is unnecessary. With the continued practice of the proper method of touch and skillful manipulation, the examiner will be able to quickly locate the back of the fetus as a broad resistant surface immediately beneath the abdominal wall extending over a large part of one-half of the abdominal area. A very thick abdominal wall may cause this outline of the back of the fetus to be somewhat uncertain. Opposite the back the resistance will be absent and in this area the small parts of the fetus may usually be felt. The palpation of the fetal back is important since it tells if the occiput points to right or left or whether it is pointing anteriorly or posteriorly; the location of the back also

tells us where to look for the shoulder and when to listen for the fetal heart. In posterior positions it is much farther from the medium line than in anterior positions.

We now come to the more difficult location of the anterior shoulder. Statistics state that the shoulder can be located in about ninety percent of the cases. Having located the head, carry the finger up until the shoulder is felt or pass the finger along the back until a sudden depression is encountered. This is the neck and just above it is the shoulder. The head is recognized as a large globular body, the palpation of which gives a sensation of hardness which is different from any other part of the body. After we have become familiar with the "feel" of this part, it is located without any difficulty. It is as important to determine its absence as it is its presence. The absence of the head from its usual position constitutes the one immediate and positive evidence that we have to deal with a breech or a transverse position. The normal position of the head in the last few weeks or pregnancy is just above the brim or in the pelvic cavity. When the head, shoulder, and back are located, there is no difficulty to locate the breech.

This brings us to the location of the fetal heart tones. This may be done with or without the stethoscope. The shoulder and back having been located, the area of greatest intensity of the fetal heart is soon determined. The "sawed" is a double one, systole and distole, and in order to know what the fetal heart sounds like it is necessary for one to listen to the fetal heart—there is no other way to know. The rate is between one hundred and twenty to one hundred and sixty per minute and is best heard over the lower left quadrant of abdomen in about sixty-five percent of all cases, the location of the fetus and the period of gestation.

### The Internal Examination

By using the gloves or taking the usual surgical precautions, the internal examination is not likely to result in an infection. The points to be noted are the condition and site of the vagina and its outlet and its distendibility—condition of the cervix and old cervical tears—tumors of the canal which would obstruct delivery would hardly be overlooked. One of the most important points to note is the estimate of the internal pelvic measurements, and particularly the internal conjugate. The measurements of the pelvic outlet should always be made a part of the external examination. The technique of pelvimetry and the subject of pelvic contractions and their diagnosis does not belong under this subject and will not be now considered. This systematic mapping out of the fetus and the measurements of the pelvis

is indeed an important step in obstetrics, but of course the ante-partum examination will be valuable or not, according to the skill and experience of the man who makes it, and for this very reason I want to insist that all men who practice obstetrics should practice this procedure routinely, systematically, and constantly in order to make the ante-partum obstetric examination a thing of importance and value.

In the cities, and especially in the hospital practice, when one has obscure position and is unable to make out the facts clearly, we have the x-ray which may serve as well in some instances.

### Blood Pressure

One of the most important guides in ante-partum work on the pregnant woman is the ascertaining from time to time of the blood pressure. It will be remembered that the blood pressure of pregnant women is lower than normal. Those suffering from high blood pressure may be conveniently divided into four classes: (a) those who have a latent chronic nephritis which becomes active as soon as pregnancy occurs and is associated with urinary changes; i. e., albumen and casts, gradually becoming worse; (b) hypertension associated with valvular heart lesions, well compensated. In these the hypertension is present from the beginning and is not necessarily accompanied by urinary changes unless compensation fails; (c) hypertension associated with marked renal changes occurring generally at six and one-half months and followed by eclampsia if not treated; (d) so-called liver cases where the signs of oncoming eclampsia are not manifest, where the urinary conditions are normal, the functional test is satisfactory, yet the blood pressure, which has previously been normal, steadily rises to be followed shortly by an eclamptic seizure and death if pregnancy be not immediately interrupted. This is more apt to occur during the seventh month. Taking into consideration these various conditions therefore, the great importance of determining the blood pressure during pregnancy becomes very evident.

The prospective mother should be informed of the absolute necessity of insuring safety to self and her unborn by frequently presenting herself for the purpose of personal health inventory, receiving instructions as to diet in keeping with the individual case, the kind of degree for exercise and the character of her clothing. The importance of fifteen day reading of blood pressure, checking of renal output, as to amount, chemical and microscopical findings, normal and abnormal constituents.

These frequent ante-partum observations should furnish occasion for noting her physical

index as manifested by the presence of undue vomiting, bilateral headaches, increased arterial tension, ocular manifestations, gastric disturbances, perverted nervous phenomena, edema, and general diminished excretions and secretions.

Reference: Shears Text, 2nd Ed. C. A. Ritter, Jour. Ob. No. 503. Schickela, Paris Medical Press, Jan. 24, 1920.

618 First National Bank Bldg.

### PROPHYLAXIS IN OBSTETRICS\*

J. WINTER BROWN, M. D.

TULSA, OKLAHOMA

Pregnancy and labor are as old and inclusive as life itself. Obstetrics is hardly less ancient. It has interested people ever since the human race began; it interests them now, and will, as long as people continue to exist.

According to Williams, it was not until 1543 that we had any scientific knowledge on the subject, and it has been gradually growing until the present time. During this time our information has accumulated more or less in the ebb and flow form; there being long periods when little if any progress was noted, and then again short periods when much was done. We are just now in a period of many changes.

As our civilization and education advance, we find from time to time that problems and conditions arise which demand new methods and technique, and our progress is noted by these changes. The day when the pregnant squaw on the march, knowing she was about to go into labor, hurried on ahead and squatted down beside the trail, gave birth to her child, then gathering her infant up in her arms hurried on again with the march, is past for us. Even in old China where the people are bound down in their heathenism and superstitions, and where the male is not supposed to be near when the child is born, marked changes are taking place, and the western trained doctor is wanted and desired to be present.

Compare the average American home of twenty-five years ago with its five to ten children, with that of today where there are only one to four. Is it any wonder that many of the foremost men of our land are becoming alarmed about the American home of the future?

Let us consider a few things which may have caused this change. I admit society has changed, and that more of our people live in the city than in the country; also there is more money to spend, better means of travel,

\*Read before the Tulsa County Medical Society, February 14, 1921.



and that many of us like to have a good time and do not want to be tied at home with a baby. Is the mother instinct being smothered by the craze for spending and having a good time? Perhaps there are other reasons. Are we as doctors doing all we can? Has the advance in the science of obstetrics kept pace with our other advances during the last twenty-five to fifty years? Have we been able to make child-bearing any safer, and has the fetal mortality been cut down much? Dr. DeLee, of Chicago, says, "Taking everything into consideration, I feel sure that the statement cannot be contested, that 8000 women die annually in this country from puerperal infection." Quoting from a report made for the U. S. Department of Labor: "In 1913, in this country at least 15,000 women died from conditions caused by childbirth. About 7,000 of these died of child-bed fever, a disease found to be almost preventable; and the remaining 8,000 from diseases now known to be, to a great extent preventable, or curable. In 1913, child-birth caused more deaths among women fifteen to forty years old, than any other disease except tuberculosis."

Dr. Davis, of New York City, says: "From time immemorial the distress, danger, and frightful loss of life incident to the process of reproduction of our race has been proverbial. The annual total loss of life from this cause is staggering. The horrible thought about this is the knowledge that much of this loss of life is unnecessary and preventable."

We still see today cases where they douche for post-partum hemorrhage, and often as a daily routine post-partum. In how many doctors' bags do you find enough sterile gauze to pack a uterus properly in case of post-partum hemorrhage? It is true you seldom see a case; lots of doctors never have had a case of it and we hope they never may; but we all know they do happen and that is just the reason we should always be ready for them. Do we all have our sheets, towels, sponges, etc., sterilized as we know they should be? Do we have good rubber gloves and use them? Some may say that they are not necessary, but we all know of cases where they say typhoid developed a few days after delivery, and strange to say, almost all of these cases die. Allow me to summarize eleven cases brought to a surgeon within ten months for section: Average number of vaginal examinations for each patient, seven. In only three cases had the attending doctor worn gloves. In seven cases little or no pretense at asepsis. One case, no vaginal examination had been made. Average number of hours in labor before brought to surgeon, thirty-seven. Membranes had been ruptured for an average of eighteen hours. I am sure this would be enough to discourage any surgeon. I do not think these conditions

are due, in most cases, to ignorance, but more to indifference on the part of many doctors. The day should be past when obstetrics is looked upon as any old woman's work.

In talking with a doctor, a graduate of one of our best schools, who is practicing in a small town, I asked him about his obstetrical work. He admitted that he did not wear gloves, nor use sterile sheets, towels, sponges, etc. His excuse was that no other doctor around there used those things, and if they could get away with it he could too. Not long ago he had a case die of puerperal infection. Another thing I wish to speak of is the danger a lot of women are exposed to through doctors who are handling infectious cases and attempting confinements at the same time they are treating the other cases. There may no harm come of it, but why run chances when not necessary, and especially when the danger is not to you but to your patient?

Nearly all young women have known or heard of cases of death during child-birth or soon after; they have heard women say that all their trouble and sickness dated to the time the baby was born; they have heard them tell of the intense suffering and the awful things connected with child-bearing. Can you blame them for not wanting to bear children, or after having passed through it once, being unwilling to go through it a second time?

In talking with a young father not long since he remarked that his wife almost died in both her confinements, and then asked the question, "Do you think we are willing to run the risk again?" I am sure any of us will agree with him in not taking any more chances. What can we do to cut down both the fetal and maternal death rate and make child-bearing both a little safer and easier?

I believe the time is here when the public will demand better obstetrical care. You know the old saying, "Necessity is the mother of invention." In the case of obstetrics it is being worked out today. Just what it is or will be, no one knows, but a number of things are being tried out. You know the sensation "twilight sleep" produced a few years ago, and today it is not a thing of the past by any means. Dr. Irving W. Porter, of Buffalo, N. Y., is doing versions today to do away with the second stage of labor and save the perineum, and I have heard many of his patients say that they had very little pain and felt fine. Today he is looked upon by the women of Buffalo as a prodigy, and his methods are being discussed pro and con by medical men everywhere.

You see Dr. DeLee of Chicago doing the lateral perincotomy and applying what he terms prophylactic forceps. His contention

being that the mother is saved of nearly all the second stage of labor, and especially in primipara the end result is a better pelvic floor, as in primipara you very often get tears, and sometimes very bad ones, and that you can repair a smooth wound much easier and better than a ragged one.

You see Dr. Ross McPherson and others of New York City doing the median episiotomy and applying forceps, claiming the same or better results than Dr. DeLee gets. Here we see the whole aim is towards shortening labor, reducing pain, and insuring a better pelvic floor. Note Dr. McPherson's new figures in treating eclampsia by the conservative method. Maternal mortality less than 10%. Fetal mortality less than 30%. The old figures being 25%-30% maternal death, with 40% fetal.

Now we all know that things can be done in well managed hospitals and by certain men, which if taken up by the general profession might prove a failure. Take, for instance, the use of pituitrin, which if used properly is a great blessing, but the number of ruptured uteri and dead babies due to its promiscuous use, no one will ever know.

While these things are being worked out by men in a position to do them properly, we must not lie down on the job. We must more and more realize the importance of the expectant mother coming to us early, and should try to educate the public to this fact. In those cases which do come to us early, we should in every case make a complete physical examination, including all the pelvic measurements, and noting whatever abnormalities are found. Up to the seventh month the blood pressure should be taken, and the urine examined monthly at least. The last two months these tests should be made every week or two. The blood pressure is becoming more and more important as a diagnostic point in approaching eclampsia. If there is a deformity in the pelvis, we should always have in mind that it is a possible section and treat it as such. If you think the baby can be born, give a test of labor, and if things do not progress as they should, then make one vaginal examination, being as aseptic as possible, and determine, at least to the satisfaction of your own mind, whether the child can be born. Then if it is to be a section, you have a good case, as there has been but one examination and in most cases an unruptured membrane, and the surgeon has every chance of getting a live baby and of leaving the mother in good shape.

Allow me to state a case in which this was not done. A primipara engaged a doctor who did not do pelvimetry. She went into labor, called her doctor, who in the course of the day made several vaginal examinations. Little progress, so he put on forceps but could not

pull baby through. Called in another doctor, who also put on forceps and failed. They then called in a surgeon, who delivered a dead baby by section. The mother developed a severe infection and had a hard fight for her life. After passing through all this, is she apt to want to try it again? She had a contracted pelvis with rather large baby. Had there been careful measurements taken and the contraction noted with a large baby, there would likely have been a section done in the first place with a live baby as a result, and the mother have passed through nothing more than an ordinary laparotomy.

The doctor should have the complete confidence of his patient and give her needed advice and instruction as to how to prepare for the baby, advice as to her mode of living, and what things to report should any complications arise. She should be taught how to prepare vulva pads, and the doctor should have them sterilized for her.

One of the most important, yet I fear most often neglected items, is the keeping of a labor record. Just how long each stage lasts and the character of the labor. Were forceps applied, and any post-partum hemorrhage, lacerations, and how repaired? Baby living or dead; if dead, cause, etc.? Let us take an imaginary case. Say there is some pelvic contraction, yet the doctor thinks he can get the baby. He applies forceps or does version; result, dead baby. The next time she is pregnant she goes to another doctor, who says he can get the baby, or to the same doctor who by this time has forgotten the details of the case, and thinks he sure can do it this time. Result, another dead baby. And should this thing happen again, she certainly will give up in despair. If the doctor has a complete history of the former delivery, he will not likely attempt the second, but will have a section done. If she goes to another doctor he will of course learn from her what happened the first time and when possible get the complete history of the first pregnancy and labor from the other doctor, which will be easy if a record is kept, and then he will be better able to determine what course to pursue. In order to give the best services, we must be willing to seek and to give help where we can.

How necessary it is that we examine most carefully for tears and that they be properly repaired. How easy it is where there is poor light and you are in a hurry to get home, to overlook lacerations. The fact that the patient's future well-being depends so much on this, warns us to be on our guard. The large number of cases which the surgeon has to repair every year proves that we perhaps have not done all we could.

I am sure you will all agree with me that

the earlier we can treat hereditary syphilis the better, and we must face the fact that there is a large number of syphilitic children born each year; Williams says about one in ten. We all know the burden on society and on the state many of these children become. Why not have a Wassermann done on all our cases as early in pregnancy as possible, and where positive, start the mother on an intensive course of antisyphilitic treatment? Williams says that syphilis is the most frequent cause of fetal death, or death in children soon after birth, being 34.4%, almost as much as the next three causes, dystocia, toxemia, and prematurity combined. He furthermore thinks that this fetal death rate can be cut down five-sixths by early recognition and intensive treatment of the mother.

### Summary

We must recognize the changed conditions in our women of today from those of 25 to 50 years ago, and must change our methods to meet these conditions. The public is expecting and demanding better obstetrical care along the line of suffering during labor, less danger of death to both mother and child, and the mother being left in better condition after labor.

This can be done by the profession recognizing the seriousness and importance of pregnancy and labor, and giving more thought and care to each case. Take better histories, do good pelvimetry, better ante-partum care so as to be able to recognize any complications early and thus be able to treat them better. Being more careful of our antisepsis during labor, recognizing lacerations and repairing them properly and following our cases for several months post partum. Early recognition and intensive syphilitic treatment in those mothers having the disease.

### RETROPERITONEAL PERIRENAL LIPOMAS

One case is recorded by Walter R. Holmes, Atlanta, Ga. (*Journal A. M. A.*, Oct. 16, 1920). Retroperitoneal lipomas form a group of rare abdominal tumors, arising from the fat which normally surrounds the kidneys. The etiology of these tumors is unknown. They occur most frequently between the ages of 40 and 50. In the reported cases, 70 per cent occurred in women. The symptoms of perirenal lipomas are those resulting from pressure of the tumor. Because of their silent beginning, the tumors have usually attained enormous size when first seen by the surgeon. The diagnosis is difficult and is made usually at necropsy or at the time of operation. The treatment is surgical. The intimate relationship of the tumor to important structures makes their removal difficult, with a primary mortality of 20 per cent. in the cases reported in the literature. The prognosis is grave. Recurrences after operation are frequent. These recurrent tumors have a tendency to undergo malignant degeneration.

### THE COLON BACILLUS AS A FACTOR IN THE DISEASES OF INFANCY AND CHILDHOOD.\*

T. C. SANDERS, M. D.  
SHAWNEE, OKLA.

The colon bacillus was discovered by Escherich in 1885 from a culture obtained from the bowel discharges of a breast fed infant. It is practically always present in the intestinal tract of the human family at all ages, having been demonstrated as early as four hours after birth, it is also found in intestinal tract of many higher animals. It is found in almost pure culture in the large intestine, while in the small intestine it usually grows in association with other bacteria. As a result of this widespread distribution it is not so surprising that the colon bacilli is a rather frequent etiologic factor in a variety of disease conditions either being the sole cause or part of a mixed infection.

So long as this organism remains confined to an undenuded intestinal tract, which is seemingly immune to its presence, it is harmless to its host, but should it be transported to certain other tissues—by blood or lymph circulations or by continuity of tissues, then it may and frequently does produce serious infectious conditions to develop in these respective tissues, which, unless recognized early and properly treated, may terminate badly for the patient.

Among the more important disease conditions that may result due to infection with colon bacilli may be mentioned appendiceal abscess, peritonitis, pyelitis, pyelonephritis, cystitis, perirectal, and other abscesses.

I will not attempt to go into detail regarding all of the disease conditions caused by the colon bacilli, but will confine the rest of my time to one condition, which in the past few years has opened up a very important and new field of medicine to those of us who pay special attention to diseases of infancy and childhood—namely, pyelitis. In the past few years I have been rather on the lookout for this condition, and have been successful in finding many cases, while in previous years similar cases had been treated more or less symptomatically and as fevers of unexplainable etiology, and I feel that my experience has possibly been that of many of you. If not, I would suggest that in any of your unexplained, not clear, fevers of infancy or childhood, that you early secure a specimen of urine from your patient and make or have made a microscopic examination of same, and you will be surprised how often you will hit the trail to proper treat-

\*Read in Section on Pediatrics and Obstetrics, Annual Meeting, Oklahoma City, May, 1920.



ment of your case. Pyelitis, as its name signifies, is a suppurative inflammation of the pelvis of the kidney, and may either be primary or secondary; in infancy and early childhood it is practically always primary, and is considered primary for the reason that there is no demonstrable lesion in the genito-urinary tract to which it is secondary; however, it may occur in association with other diseases, particularly the enteric troubles, but may and does frequently occur without other apparent coexistent disease. The secondary form is usually a mixed infection, and occurs principally in older children and adults.

The colon bacilli is the sole cause in the majority of cases of the primary form of pyelitis. This form is almost exclusively a disease of infancy and early childhood, and as stated above, we are now recognizing and properly treating a serious disease condition, which was just a short time ago frequently mistaken for malaria, typhoid fever, pneumonia, meningitis, and a variety of diseases. It was for many years thought to be an ascending infection because of its greater frequency in females, the short urethra, its proximity to vagina and anus and its frequent association with diarrheas, when large numbers of the colon bacilli were being constantly discharged into the diapers, the organism entering meatus and traveling up to the pelvis of the kidney, which seems particularly susceptible to invasion by this organism. More recently, most authorities are of the opinion that it is a hematogenous infection - the colon bacilli entering the blood or lymph circulations through some abrasion, trauma or otherwise, and is then carried to the pelvis of the kidney where conditions favor its development; the best evidence of this theory is the demonstration of the colon bacilli in the blood in the early stages of pyelitis, or even before the appearance of symptoms of same.

The symptoms of pyelitis in infants and young children are not as a rule characteristic; some cases showing slight temperature, while others with no worse urinary findings come on rather violently with high temperature, 104 to 105 degrees F. The temperature as a rule is quite variable, with marked excursions; it may be remittent or intermittent. A very notable feature in even the high febrile cases is the apparent lack of general constitutional disturbances in relation to the fever, some of these cases not appearing very sick in spite of high temperature, and even after continued fever of some duration, only exhibit possibly some loss in weight, and perhaps some anemia. In the more atypical types, there is sometimes associated—anorexia, vomiting or diarrhea, some pains in abdomen, general muscular soreness or aching, especially in lumbar region,

the child complaining when moved. Again the patient may have irregular chills, and when you meet with chills in infants, they should suggest the possibility of pyelitis, as chills in infants from other causes are really rare birds. Again, some infants having pyelitis may have rapid respiration along with other symptoms, suggesting possibility of pneumonia, or some may present marked nervous phenomena, suggesting meningitis, but with all the various symptoms that might present in this infection, there are really only two which occur rather constantly—namely, fever and pyuria. The urine is diminished in quantity, is nearly always turbid from the presence of pus, the amount of pus varying from day to day, and bears no special relation to the height of the fever. Reaction usually highly acid, and contains albumin in proportion to the amount of pus.

W. B. C. varies from 13,000 to 30,000 in febrile stage.

From the above it would seem your diagnosis will rest upon a microscopic examination of urine, and the same has been quite true in my experience. Secure early in any otherwise unexplained fever of baby a specimen of urine, and examine same and you will often be rewarded in finding where your patient's trouble lies.

The course of pyelitis is quite variable, running anywhere from a few days in mild cases to 6 or 8 weeks in more severe cases, with a great tendency to relapses and recurrences; and a fall of temperature to normal does not always mean the end of your trouble, for frequently after a remission of several days there may be a return of the febrile state, likewise pus may be found in urine for some time after the disappearance of constitutional symptoms.

As to treatment there are three chief methods advocated;

- (1) Making and keeping the urine alkaline by giving such drugs as potassium citrate or sodium bicarbonate as colon bacilli do not thrive in an alkaline media.

- (2) By giving urinary antiseptics of which urotropin is the favorite.

- (3) Vaccine therapy, of which the autogenous vaccine has seemingly given best results. But neither stock nor autogenous vaccines have been as successful as had been hoped, and the value of same is still a mooted question.

It is advisable to first try alkaline treatment, and if unsuccessful switch to urinary antiseptics, and in giving urotropin it is well to combine with sodium benzoate or similar drug, as it acts best in an acid media. Two very important adjuncts to any form of treatment is rest and the pushing of fluids; even though

your baby takes plenty of milk, give lots of water between feedings, and in older children it will be easier by adding fruit juices, etc., the idea being to keep kidneys flushed and the specific gravity of urine low. The bowels, skin and ordinary hygienic measures should be looked after the same as in other infections.

Under the above plans the great majority of cases recover, though occasionally one will become chronic.

Bibliography: Forcheimer; Dunn.

## CHANCROIDAL INFECTION—DIAGNOSIS AND TREATMENT.\*

E. LEDLEY COHENOUR, M. D.  
TULSA, OKLAHOMA

My purpose in presenting this paper is to briefly state a few of the most salient features regarding the diagnosis and treatment of chancroid, in order to promote discussion; which I believe to be more beneficial than the paper itself.

### Diagnosis

In making the diagnosis, I think it is well to obtain and keep a full history of all cases, and to bear in mind the general characteristics of chancroids. In the ordinary run of cases, within two or three days after exposure, there appears a reddened area, which very soon develops a papule, changes to a pustule and, upon rupture of the latter, which occurs in rapid succession, there results the typical ulcer with overhanging, undermined edges. The surface is irregular, honey-combed, and covered with grayish necrotic tissue. It exudes a thick purulent secretion, and as a rule there is little if any induration. Upon palpation there is extreme pain and sensitiveness, this being the chief symptom the patient complains with.

Probably the most distinctive characteristic of the chancroid is its auto-inoculability. This accounts for the fact that the lesions are usually multiple; for this reason, also, auto-infections may occur on any surface of the body where an abrasion exists.

The chancroid must be differentiated from the hard chancre; ulcerated herpes; tuberculous ulcers; mucous patches and gummatous ulcerations; epithelioma; chemical burns; simple abrasions; and balanitis. The possibility of a mixed lesion should always be borne in mind, and prolonged observation is often necessary to a correct diagnosis. A beginning chancroid may in two or three weeks develop into a luetic

chancre, both infections having been acquired simultaneously.

The smooth symmetrical outlines, the peculiar hardness, the thin viscid secretion, and the characteristic elevation, should serve to distinguish the chancre from the chancroid; however, the only positive way is by darkfield observations of smears for the spirochaeta pallida, and by Wassermann blood tests. As a rule the hard chancre is single. Ulcerated herpes is apt to be confused with chancroid when it occurs as a solitary ulcer. It is not so deep nor distinctive, and under proper treatment clears up promptly. Tuberculous ulcers are uncommon on the penis, and are usually associated with tuberculosis elsewhere in the body. Mucous patches and gummatous ulcerations are differentiated by the presence of syphilitic manifestations in other parts of the body and by the laboratory findings, as a result of blood test. Epithelioma occurs as a papillomatous ulceration, as a rule late in life and is distinctively destructive. Microscopic examination of a section of the growth leaves no question as to the diagnosis. Chemical burns, simple abrasions and balanitis are differentiated by the history, their superficial nature, and the absence of the characteristic appearance of chancroid.

It must not be forgotten that chancroidal infection is local in character, while syphilis is a general infection; and, that one dose of arsphenamine, in the primary stage of lues, is worth ten after the secondary symptoms have developed; therefore, the importance of early diagnosis. I believe that all lesions of the external genitalia should be classed as venereal ulcers until definite diagnosis is established and, that all chancroids should be considered as potential cases of syphilis. Repeated daily examinations for spirochetes should be made before cauterization; Wassermann tests should be made every two weeks, and the patient kept under observation, whenever possible, for at least ten weeks.

The chief complications are enumerated as follows: 1. Perforation of the frenum. 2. Phimosis. 3. Paraphimosis. 4. Lymphangitis. 5. Adenitis, the end result of which is usually suppurating bubo. 6. Phagedanda, which is rare, except in debilitated subjects and chronic diabetics.

### Treatment

Prophylaxis: Chancroidal infection is readily preventable by extreme cleanliness, the use of antiseptics, such as 1-1000 solution of bichloride or a 2 per cent phenol solution, and followed by the thorough application of a 30 per cent calomel ointment.

General Treatment: The patient should be

\*Read in Section on Genito-Urinary, Skin Diseases and Radiology, Annual Meeting, Oklahoma City, May, 1920.

put to bed, kept clean, and given a nourishing diet. Rest not only aids in prompt healing, but greatly reduces the danger of bubo. Iron tonics should be given to those poorly nourished or debilitated, and they should be advised to avoid alcoholics and sexual intercourse. In cases where adenitis has set in, hot applications should be applied continuously until resolution is complete, or there is suppuration to the point where incision and drainage are indicated.

**Abortive Treatment:** This involves the complete destruction of the ulcers by cauterization, thereby transforming virulent lesions into clean healthy granulating surfaces, which follow an uninterrupted course of healing. The earlier this is done after the preliminary darkfield observations, the better the result and the greater the satisfaction to the patient.

The method I use at present, considering that all the ulcers are accessible, is as follows:

1. Cleanse the ulcer and adjacent parts with 1-1000 bichlorid; dry thoroughly, using small gauge sponges.

2. Apply small pledgets of cotton soaked with 10 per cent novocain or cocain hydrochlorid solution for five minutes, using pressure during the last two minutes; then dry thoroughly and apply a thin coat of plain vasoline to the parts adjacent to the ulcers.

3. Then apply pure phenol to the entire surface of the ulcer and the undermined edges and leave for one to two minutes; then flush with sterile water, dry, and apply fuming nitric acid. Then flush with sterile water, dry again, and dress with cold compresses of 2 per cent boric acid solution or with 10 per cent thymol iodid or iodoform in glycerin. I prefer the latter. After cauterization there results an acute inflammatory reaction, the slough is thrown off, and in successful cases a healthy granulating surface is left, healing takes place quickly, and the danger of bubo is almost eliminated. It is sometimes necessary to cauterize a second time, but rarely oftener. In extreme cases I give a general anesthetic, preferably gas or ethyl chlorid.

Cauterization is contraindicated:

First. In healing chancroids. Here the infection is already under control and nothing could be gained by cauterization.

Second. When the ulceration is so extensive and so situated that cauterization would result in considerable deformity, as in chancroid at the meatus.

Third. In cases where only a part of the ulcers are exposed, as in chancroids of the muco-cutaneous edge of the foreskin, where there are existing lesions under the foreskin, as in cases of phimosis.

The first principle in the treatment of chancroids, regardless of what antiseptics are used, is to keep them as free from pus as possible, both to promote healing of the ulcer and to prevent infection of the lymphatics. In all cases, particularly in those in which there is edema of the foreskin, the patient should soak the penis in hot water for one-half hour, several times daily.

When, after abortive treatment, the ulcers fail to heal kindly with the use of other antiseptics, I rely on iodoform, either the powder or in the form of a 10 per cent suspension in glycerin. If healing seems sluggish, I use balsam of Peru, which rapidly stimulates the growth of granulations; however in some cases there is an overgrowth of granulations, and in these cases I make one or two applications of compound alum powder, to remove the same.

I do not believe that the dorsal slit should be made, if progress can be made without it, and never circumcision until after all infection has entirely disappeared. When dorsal slit is made the entire wound becomes infected and cauterization is done under general anesthetic.

In the past few months I have used 1 per cent mercurochrome "220" solution, as an application after cauterization with very gratifying results; also, as a wet dressing for bubos after free incision and drainage, and have noted a clean granulating surface in these cases in an average of about eight days. I cover such dressings with a sheet of rubber tissue to prevent staining of the patient's clothes.

I do not believe that a chancroidal bubo should ever be dissected out, but always incised when ready, and if not completely broken down, it should be curetted and dressed as above mentioned (mercurochrome), or with 10 per cent iodoform in glycerine.

**Fulguration:** At this point I would like to call your attention to the treatment of chancroids with the high frequency current. This, I believe, is destined to become the specific treatment for all types of chancroids, and chancroidal bubos after incision and drainage. Although I have had no experience as yet with fulguration, I hope to be able to make a report by this time next year. I mention it at this time because there has been considerable literature on the subject recently, and it received wide discussion and very favorable comment at the New Orleans meeting of the A. M. A.

It was first brought to the attention of the profession in 1905 by MacKee. Later, in 1917 Robbins and Seabury<sup>1</sup> of Detroit reported a series of 34 cases with very gratifying results. Recently, Jacobs,<sup>2</sup> of Philadelphia, wrote a paper based on a study of 52 cases treated by fulguration; of these only four developed



bubos, two of which resolved, and two of which suppurated. Thirty-nine of the chancroids were entirely healed in two weeks; seven within three weeks; and six in from three to five weeks. Even more recently Kessler<sup>3</sup> of Philadelphia has written a paper detailing this treatment, with a report of 50 cases treated by the method, as outlined by Robbins and Seabury, which is as follows:

A small pledget of cotton is wet with 10 to 20 per cent solution of cocain hydrochlorid and applied to each lesion. After five to ten minutes this is removed, the field carefully dried and a 25 per cent solution of copper sulphate in distilled water is applied to each lesion, and the high frequency spark from a fine pointed glass vacuum electrode is applied directly to each lesion from one to three minutes, depending on the extent of the ulceration. Where the ulcers were deep or the edges extensively undermined, Kessler modified the technique by attaching a small wire such as a paper clip to the end of the vacuum electrode. He also emphasizes the following points:

1. The danger of too little rather than too much cauterization.
2. Thorough cleansing at the time the lesion is fulgurated.
3. Especial care to carry the spark well down into every fissure and undermined edge.
4. Fulguration should extend over the edge of the lesion about 1-16 of an inch into the apparently healthy area.

After fulguration he dresses the wound with a 2 per cent boric acid pack and has the patient return each second day for observation. In only a few cases was it necessary to fulgurate a second time; all cases excepting four healed in from four days to three weeks, one of these was a case where there was extensive edema and sloughing following circumcision for chancroidal phimosis.

Kessler states that the copper sulphate is essential and that regardless of what change takes place, whether chemical or otherwise, that the combined treatment produces deep sterilization of the chancroidal ulcer, changing it from an infected ulcer to a healthy ulceration, the results of which are very gratifying.

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1. Robbins and Seabury in *The Journal, A. M. A.*, October 13, 1917, p. 1217.
2. H. L. Jacobs, M. D., Philadelphia, Pa., *Archives of Dermatology and Syphilology*, Chicago, April 1920, p. 434.
3. "The Cure of Chancroids with the High Frequency Current." By Wm. C. Kessler, M. D., Philadelphia, Pa., *The Urologic and Cutaneous Review*, May, 1920, p. 258.

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### Discussion

Dr. E. S. Lain, Oklahoma City: I, too, was interested, and I wish to compliment the author upon his most excellent resume of the treatment of bullous edema and the treatment of chancroids. In my special work chancroids are only incidental, when present we treat them. We do nothing with syphilis and as Dr. Day mentioned, they are so frequently associated and misdiagnosed. That is, the chancroidal infection is so frequently mixed with syphilitic infection, so frequently passed by the man who doesn't examine carefully as to both.

I was particularly interested in what the author had to say about the high frequency and the fulguration current and its origin. I was fortunate enough to hear Dr. McGee in 1905 suggest the use of high frequency in ulcers in general. Incidentally, he mentioned chancroids. I came home and began its use while I was yet in the general practice, and I have used it up until now.

In 1915, if you will pardon the little personal reference, if you will read the paper which I read before the Dermatological section of the A. M. A. in San Francisco, I called attention to this treatment, and, that in chancroids it seemed to be almost specific. I do not have the experience that many of you have, but I do want to insist on your using this treatment. Most of you have the outfit almost complete for that use in your office—the same instrument and the same machine on which you do fulguration of papilloma of the bladder. Of course, it takes a little different adjustment of the winding to do that work. With most of the machines that they put out now they give you both with the machine, either for high frequency or fulguration. If you do not have the two together now, there is an attachment that will work on the same machine.

In fulguration there is a canterizing, sloughing spark—a single polar spark. The high frequency is a high current without sloughing effect. It produces a hyperemia of the parts, and its results come about by the hyperemia and also by the fact that it permeates the tissues with a substance which is also more or less destructive to organisms. I have found but few cases of chancroids that did not yield within a few days—sometimes within three or four days—to the high frequency current and these exceptions were such cases as have been complicated with mixed infections, or proved later to be of some such nature.

Dr. Hussey, of Memphis, called attention to this in a paper published in one of the genito-urinary journals some five or six years ago as one which he was using continuously in the dispensary there, and his routine was very similar to that we followed. We used copper

and silver preparations followed by high frequency current. However, I am quite sure that no less important part of the treatment is general prophylaxis, cleanliness and proper dressing, such as the doctor suggests.

*Dr. C. R. Day, Oklahoma City:* I want to emphasize some of the points mentioned. As to mixed infection: it has been my observation that a very large per cent of the so-called chancroidal infections have proven to be syphilitic infections as well, and many of the cases of latent syphilis being treated over the country today are cases that were treated primarily for chancroidal infection, the patient was told that his infection was a simple chancroidal infection and that he need have no fear of syphilis in the future.

During my service in the army we had a routine order that all sores upon the penis must be examined by the darkfield in the first place, and that later the Wassermann test be made. It was surprising to find that at least ninety per cent of them came back with positive Wassermann, so, that we must not forget that these so-called simple chancroidal infections may mean a great deal to a patient in the future. And therefore let us emphasize the point that Dr. Cohenour made, that all of these cases should be followed for a diagnosis of syphilis.

One other thing he mentions, and that is the use of mercurochrome. In my practice that has proven a very beneficial drug. Another drug that he mentioned that I would have you to be very, very careful about as a simple remedy—he, however, mentions it in connection with the ultra violet treatment—and that is sulphate of copper. I have seen more destruction from the use of sulphate of copper than I have seen result from the use of any other drug. And I wish to warn you against the use of the sulphate of copper unless you are using it in connection with the electrical treatment and thereby change the character and action of the drug.

*Dr. C. H. Ball, Tulsa:* I am interested in what Dr. Lain has said in regard to the use of electrical fulguration or the high frequency spark in chancroids. Dermatologists don't get very many of these cases, but I have had quite a number in Tulsa and even in Saint Louis before coming to Tulsa. I have used the electrical fulguration and the high frequency and the results have been extremely gratifying. I have seen several clear up in three days, absolutely.

*Dr. W. B. Pigg, Okmulgee:* About all I can add if I were addressing a body of general practitioners, would be the caution that has been emphasized here more than once—to ex-

plain to the patient the mixed infection. So many times those patients are sent in and diagnosed as a simple chancroid and the patient is told that it will be all right, and so on; this is done with the greatest assurance in the world. I wish there was some way by which we could be warned as to the danger of this cocksure diagnosis.

As a matter of fact in the use of fulguration and these other and more scientific treatments, the majority of the patients that we have down in our country are healthy, indifferent people, very hard to do anything with; you have to drag along and do the best you can, but the first treatment outlined by the doctor has been the method we have used most frequently. It is time that the general practitioner should be wised up to the nature of the danger in what seems to be a simple chancroid.

*Dr. C. M. Ming, Okmulgee:* I have recently had a case that illustrates Dr. Cohenour's point that these infections are frequently mixed. A case of facial paralysis. The man had an infection in 1917; physician treating him at that time diagnosed as chancroidal infection. Later on he was in the army, and for some reason blood tests were made, which were negative. When his facial paralysis came I had his blood tested and this time the Wassermann was positive, emphasizing the point that cases are sometimes dismissed with what seems to be clearly chancroidal, and which are really mixed infections.

*Dr. Cohenour, closing:* I want to thank the men who so ably discussed my paper. I want to apologize to Dr. Lain. I got this paper up so hurriedly I didn't get to look up all the literature.

I again wish to emphasize that the most important thing in chancroids is the early diagnosis.

What Dr. Day said regarding copper sulphate I think is true, but I just mentioned it in the use of fulguration, only.

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**Fake Orange Beverages.** The orange and other citrus fruits possess value other than that which can be measured by flavor or fuel value. They are relied on as antiscorbutic by a large number of persons in the preparation of food mixtures which for some reason are deficient in this protective element. Oranges merit additional favor because they are relatively rich in the water-soluble vitamin B, sometimes designated antineuritic vitamin, which promotes well-being in as yet an undetermined way. In view of these facts, the chemists of the U. S. Public Health Service have done well in their timely warning against the "fake" orange beverages that have come to their attention. They report that in most cases the fraudulent products consisted of carbonated water, flavored with a little oil from the peel of the orange and artificially colored to imitate orange juice (Jour. A. M. A., Oct. 16, 1920, p. 1073).

## CLINICAL HISTORY AND AUTOPSY FINDINGS OF BRAIN TUMOR IN BOY FOUR YEARS OF AGE\*

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The reason for presenting the clinical history and autopsy findings in this case is that the signs and symptoms (see below) were mild and out of all proportion to what might be expected when the true etiological factor in their production was ascertained and that it might stimulate a tendency to a closer observation and clearer interpretation of the few most prominent symptoms where no definite cause could be ascertained, namely, headache in early childhood, vomiting and convulsions without sufficient cause being found, and, change in child's disposition.

Master S. R., age 4 years, third offspring of healthy parents, was an unusually healthy child up until 3 1-2 years of age, never having been sick a day, according to the father's history. Eight months previous to the last illness, while playing on sidewalk, Master S. R. was knocked down by a blow on head from a blunt stick. He quickly recovered and played again the same day. The incident was forgotten as no apparent damage had been sustained.

Three months later he had his first general convulsion, followed in a few minutes by a second one, not so severe. Recovery seemed to follow the usual plan of management for such conditions. History of having eaten very heartily of indigestible food the day before, and to this condition was attributed his convulsive seizure. At no time did I see involvement of any single group of muscles or limb. The convulsions were always general. There were three recurrences of these seizures at different intervals and one attack of influenza. This attack of influenza, though severe, was not complicated by a convulsion or pneumonia, but convalescence was prolonged. This attack was two months before time of death. During intervals he had only fair health. His parents noticed that his appetite was variable. He lost weight and became pale. His character and disposition changed from that of a bright, active, happy child to a very nervous and irritable one. He complained frequently of headache, usually of the frontal region. The convulsive seizure one month before death was more severe than the preceding ones, and lasted—with slight remissions—for twelve hours, in spite of rather energetic treatment with various sedatives and antispasmodics and free bowel elimination. These convulsions also were gen-

eral and not limited to any single part of the body. He was brought to my office once between this attack and time of his death. The history was that he had never been quite so well since the last attack, though he played and was interested in his playthings, and was out each day. He had headaches, anorexia, and vomited occasionally without assignable cause. Was markedly constipated. Physical examination showed a fairly well nourished boy of about 4 years, slightly pale, very active and bright, somewhat nervous, musculature rather soft and flabby, tongue coated, eyes reacted to light, ears, nose, and throat negative, abdomen negative, no rigidity of muscles of neck, no Kernig, no spasticity of muscles of extremities, no adenitis.

A tentative diagnosis of intestinal indigestion was made. He was put on tincture nucis vomica and cascara. A diet was outlined and I saw him no more until the day of his death four weeks later. His death followed a convulsive seizure, and for the first time it was noted that at the beginning of seizure only one side of body was involved and that this was soon followed by a general convulsion. His temperature reached 106 degrees. Following this he went into state of coma, dying six hours later. Permission was obtained for autopsy, with the following findings, as reported by Drs. Brown and Turley of Bierce Laboratory.

### Report of Autopsy

Postmortem examination showed a marked tenseness of the meninges, with a congestion of all of the meningeal and cortical vessels. The meninges were adherent to the brain substance over an irregularly oval area, from 25 mm. in diameter, which was located upon the supero-lateral surface of the right frontal lobe of the cerebrum, in the region of the middle frontal gyrus inferior to the superior frontal sulcus and immediately anterior to the precentral sulcus. Immediately beneath the above described area of meningeal adhesion the tissue seemed very soft in consistency, and could be made to fluctuate upon palpation. Upon incision sanguineous, necrotic material escaped. The cortex was practically destroyed in this region. Further examination showed the above described necrotic material to fill an irregularly oval cavity, approximately 90 mm. in its greatest length (antero-posteriorly) and 50 mm. in its greatest width (medio-laterally.) This necrosis involved the posterior and inferior part of the frontal lobe, the anterior part of the parietal lobe, and a small portion of the superior part of the temporal lobe. The external surface markings outlining the necrotic region could be said to extend posteriorly almost to the postcentral gyrus, anteriorly to

\*Read in Section on Pediatrics and Obstetrics, Annual Meeting, Oklahoma City, May, 1920.



the middle of the frontal lobe, and inferiorly to a level slightly below the lateral fissure. The cortex was not involved in the process, except as mentioned above. The lateral ventricle of the right lobe was involved to such an extent as to make it almost indistinguishable except for the presence of the deeply injected choroid plexus. This necrotic process was apparently fairly well walled off from the normal brain tissue. Cultures were taken from the necrotic tissue for bacteriological study, but all proved negative. A piece of the tissue, bordering on the necrotic area, was taken for microscopical study, and a diagnosis of sarcoma was made. No other gross pathology was noted in the brain.

Anatomical Diagnosis: Sarcoma of the right cerebral hemisphere, with necrosis.

:::::

Brain tumors are very frequent in childhood. One third of all cases of brain tumor which have been analyzed occurring during the first two decades of life, sarcomata ranking third in frequency, that the symptomatology is determined more by the seat of the tumor than by the nature of the neoplasus. The most pronounced symptoms were the unexplained headaches and vomiting with the occasional convulsion, but the associated symptoms did not attract attention to the probability of brain tumor.

Most observers mention trauma as an etiological factor and it seems possible that in this case it may have played a part.

This case seems to emphasize the fact that while the symptoms may not point clearly to brain tumor, there were some which were suggestive when taken collectively, namely, headaches, which are rare with children of this age, recurring attacks of vomiting not always due to dietetic errors, palor, loss of appetite, change in character and disposition of child, also convulsions without distinctly assignable causes.

### STONE IN KIDNEY—REMOVAL BY PYELOTOMY

ARTHUR DEAN BEVAN, M. D.  
CHICAGO.

He states his rule of giving all kidney stones not larger than a coffee berry a chance to pass spontaneously before advising operative removal, unless some threatening complication arises.

The one under consideration was several times the size mentioned and removal was advised. The patient was a very muscular short coupled young man. He cites a previous

operation on a man of similar build whose other kidney had been removed by another surgeon. In attempting to deliver the kidney, which was an almost impossible procedure, the stone disappeared and he was unable to locate it. He was forced to content himself with a simple drainage of the kidney. Since then he has made it a practice in similar cases to remove the stone by pyelotomy with the kidney in situ in the following manner: The usual kidney incision is made and the 12th rib is deliberately fractured at the neck. The advantage of this over-removal of the rib, he says, lies in the fact that the pleura is less apt to be injured. Three assistants are used, one holds the corresponding leg flexed at right angles to the thigh and the thigh at right angles to the abdomen with the knee elevated 12 or 15 inches above the other knee. Another makes retraction upward of the tissues and fractured 12th rib, while the third makes powerful retraction downward with a broad flat retractor. This gives him all possible exposure and enables him to grasp the kidney with the left hand, after separating the fatty capsule from the kidney, and remove the stone through an incision in the posterior aspect of the pelvis. He treats the cut in the pelvis by simply placing a cigarette drain down to it.

The technique above described was used in the case under consideration with good results. —December Number, *Surgical Clinics of Chicago*.

(Abstracted by Dr. M. E. Stout.)

### COMPLETE VOLVULUS OF ENTIRE MESENTERY.

Walter D. Wise, Baltimore (*Journal A. M. A.*, April 24, 1920), reports the case of a woman who had been operated on two years previously in another city for pelvic trouble, but had not entirely recovered, having some abdominal discomfort and, at various times, attacks of severe pain and vomiting. When the abdomen was opened, considerable straw-colored fluid and a loop of distended intestine were noted. Under the old scar was an intestinal coil tightly adherent to the parietal wall and containing in its wall a rather firm mass; running from this mass were two bands, one of which was causing the obstruction. Both were released, and the distended and discolored loop began immediately to improve in appearance. The adherent section of the bowel was easily freed, and could then be brought up into the field. It was seen that a mass about the size of an egg was embedded partly in the intestinal wall and slightly in the mesentery. It was a gauze sponge. Convalescence was smooth and satisfactory for seven days, when there was an attack of pain and some vomiting, which were relieved by an enema. Three days later, the patient had a similar but more violent attack beginning in the late afternoon. Exploration revealed adhesions of the intestine to the parietal wall and almost countless numbers of viscerovisceral adhesions, herniation of a large section of intestine through an arch made by two adherent loops, and torsion of the mesentery of at least one complete turn, probably a turn and a quarter from right to left. The patient had a surprisingly calm convalescence.

# THE JOURNAL

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This is the official journal of the Oklahoma State Medical Association. All communications should be addressed to The Journal of the Oklahoma State Medical Association, 508 Barnes Building, Muskogee, Oklahoma. \$4.00 per year, 40c. per copy.

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Reprints of original articles will be supplied at actual cost, provided request for them is attached to manuscript or made in sufficient time before publication.

Articles sent this Journal for publication and all those read at the annual meetings of the State Association are the sole property of this Journal. The Journal relies on each individual contributor's strict adherence to this well-known rule of medical journalism. In the event an article sent this Journal for publication is published before appearance in the Journal, the manuscript will be returned to the writer.

Failure to receive the Journal should call for immediate notification of the editor, 508 Barnes Building, Muskogee, Okla.

Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

Advertising rates will be supplied on application. It is suggested that wherever possible members of the State Association should patronize our advertisers in preference to others as a matter of fair reciprocity.

### EDITORIAL

#### THE McALESTER MEETING

The McAlester meeting, May 17-18-19, will undoubtedly be a success if systematic activity and work produce that result. Our members should understand that McAlester is exceptionally situated insofar as being habituated in the fine art of acting host and entertaining conventions and crowds. This fact should be remembered in speculation as to attendance. As usual with each city of average size, McAlester is now the object of solicitude and question as to its ability to care for our Association. Forget it at once—recall that it is one of the richest cities of the state, one of fine citizenship, palatial homes, and possessed of the gracious reception spirit and hospitality, unknown to most of our busy centers. This comes about by reason of its being the Mecca for Oklahoma Masonry for many years. Its consistory and inter-allied Masonic institutions have created this condition, and our attendance, even if very good, will be a small affair in comparison with meetings the city has regularly and periodically entertained for years.

We may be assured that additionally, many unusual points of interest will contribute to make the visit a marked diversion from those of the past. It is the center of one of the greatest coal industries in the United States. Due to the philanthropy of the late Col. William Busby, the city forged far ahead of any other of the state in the matter of public buildings and civic improvements, before most of us dreamed of modern advances on equal scale. The hotels are good, the various social clubs are unusually well housed. Our meeting will be entirely conducted without confusion in one building, making for the comfort and convenience of the visitors. Only a word is to be said; that is "GO."

#### NEW LAWS AFFECTING THE MEDICAL PROFESSION

The eighth Legislature, among its abortive gyrations in political experiment and illy advised action, enacted two laws directly affecting the physician, after, as naturally to be expected, emasculating them until any real constructive aid to the beneficiaries is problematical. In keeping with every other law involving the medical profession, however, it follows the course of saddling the responsibility on the doctor.

##### *An Act for the Prevention of Blindness from Ophthalmia Neonotorum*

This provides in substance; that any pathological invasion of the new-born's eyes within the first four weeks of life is to be considered coming within scope of the act.

Physicians, midwives, managers or any person in charge, manager of homes, public or private, parent, relative, concerned in any manner, upon noting "swelling, unusual redness unnatural discharge, *independent of the nature of the infection*," are required to report to the health officer, *within six hours*, and confirm such report in writing within three days. If such officer does not exist, a reputable physician must be given notice, excepting report is being made by a physician, surgeon or obstetrician. This clause is sweeping, leaving no loop-hole for evasion, quibbling or doubt. Receipt of such report charges the recipient, officer or physician, with responsibility for giving parent or other person in charge of the infant, warning of the danger to the infant's eyes. Indigent cases shall be given necessary treatment at the expense of the city, town or county concerned.

"It shall be unlawful for any physician, or midwife, *osteopath and chiropractic* practicing midwifery to neglect, or otherwise fail to insill immediately upon its

birth, in both eyes of the new-born child a one per cent solution of nitrate of silver or other proven antiseptic,"—furnished by the State Board of Health in ampules, content sufficient for one treatment.

Discretion on part of physician or parental preference for other forms of prophylaxis; or entire disregard, if deemed best, of administration, is permitted, but such failure must be fully explained in writing, with reasons therefor. Every birth report must contain statement as to whether or not treatment was given. Health officers are charged to investigate reported cases and others brought to his attention. Forms for report as prescribed by State Board of Health are to be used. The State Board is required to promulgate:

Regulations in keeping with the act.

Provide for gratuitous distribution of prophylactic outfits, which shall contain necessary directions for use.

Publish and promulgate advice on the danger and necessity for prompt treatment.

Furnish copies of the law to those concerned.

Report violations of the act to the county attorney, assist in securing evidence, etc.

Place upon birth certificates the direct question "Did you instill in each eye of the infant a one per cent solution of nitrate of silver, immediately after birth?" And to require written answer.

Violations of the Act are misdemeanors punishable by fine of not less than \$50.00 or more than \$1,000.00 for first offense, after which minimum is \$100.00 to \$2,000.00 maximum.

The remarkable abortifacient, the inconsistent exception, the inexcusable surrender of common sense, the defiance of all scientific maxim and truth on the matter, is the concession at the end:

*"Nothing in this Act shall be construed to compel persons or parents to conform to same, who have religious beliefs contrary to the use of medicines."* Under this silly exception, any ignorant person, even the insane, may interdict use upon his helpless ward. The infant of the dirty, fanatical "Holy Roller" is excluded, for its parent has just as much right to demand respect of his religious scruples as the more powerful Christian Scientist for whose vagaries this farcical clause was included.

Of course it is a little rough on the Chiropractic to be forced to administer the stuff, when he could "adjust" the matter just as well. The osteopath will have no trouble about it as he is now "legislated" into the science of intricate drug applications.

Medical Board Law: This Act repeals Sections 6889 to 6900 inclusive; 6905 to 6908;

6910, 6912 and 6913, Laws of 1910, and all laws or parts of laws in conflict therewith.

Five members constitute the board, no one school shall have a majority; Allopathic, Eclectic and Homeopaths shall be represented; those schools having only one member shall have an alternate to serve in case of their inability. The Board shall meet the second Tuesday and Wednesday in January, April, July and October at the State Capitol, may call special meetings upon ten days written notice to members by registered mail; three constitutes a quorum. Regulations may be changed from time to time in the discretion of the board to meet increased educational requirements. Any member is empowered to administer oaths, take evidence, compel attendance of witnesses in matters pertinent to the board. Practice without license is punishable by minimum fine of \$100, maximum \$500.

The Act substantially thereafter follows the usual requirements of medical practice acts generally. Registrants must register in their county of location with the County Clerk. Revocation may be had for the usual violations, other acts not specifically included, however, may also be cause for revocation. Applicants may appeal from any decision if they feel aggrieved.

#### THE ANNUAL MEETING AT MCALISTER

Members attending this meeting should remember in advance that certain officers, delegates and meeting place are to be selected. That in some cases heretofore the selections have been made too hurriedly and without due appreciation of the functions to be filled, the services to be rendered, is apparent by criticism and dissatisfaction with the final results. Much of this can be avoided by selecting as nearly as can be men who will fit the place they are selected to fill. It should be remembered that simply because some one of our friends is mentioned and his personal popularity brings him a following, that does not necessarily mean that he is the best man for the place. We have had too much prearranged selection by reason of such situations. All should be selected for their peculiar fitness for the place to be filled. The same applies to meeting places. Naturally one hesitates to place himself open to charge of opposition to a place wherein reside his friends. In this respect the place offered should be unquestionably able to fulfil the demands incident to entertaining the next meeting. It is inconsistent to say nothing at the time when talk counts most, then, after the result is announced bring out the hammer and knock, Knock, KNOCK.



## THERE WILL BE NO MORE REFERENDUMS.

The Secretary's office, acting under necessity of many suggestions and letters as to the proper course to be followed by the State Medical Association with reference to the Chiropractic and Osteopathic Separate Board Laws, advised that if either were to be questioned by referendum petition, that time was very limited, issued circular letters to officers of each society, which noted that able legal opinion held that probably the courts upon test of validity would hold the Chiropractic Act unconstitutional, but that reasonable precaution dictated that a petition be also initiated, which latter could be invoked at any time in the future should the courts finally not so hold. It was also advised that the Osteopathic Act unquestionably conferred drug-giving rights upon them, even larger increasing their already established practice of administration, then in case of prosecution, falling back upon the legal loophole of "emergency" administration. These and other aspects were set forth, and prompt reply was asked to the suggestions, which should be determined by a very early meeting and careful consideration of as many members as could be assembled. The actual returns on this are such as to leave the matter of direction to your Secretary more perplexing and uncertain than can be imagined. That our members may appreciate the situation as far as can be the returns will be briefly noted.

69 counties were mailed inquiries. 21 answered, 48 made no answer whatever. Of the 21 answering, 16 favored attack, 5 opposed. Of those opposing action, all were in the class which formerly actively combatted the repeal of Senate Bill 111, most defeating the veto proposition in November, 5 counties remitted very handsome sums by check, promising more on demand, 7 promised fixed amount on demand, 3 promised aid, but fixed no amount, one unanimously directed attack promising any necessary amount, but later decided the matter should be ignored.

As no activity involving so many possibilities can be undertaken without very definite funds in sight, but above all things, with a membership enthusiastic and cooperating on one hand, discouraged or apathetic on the other, common sense indicates that the entire matter be dropped for the time being, and that course is the one followed, all remittances having been returned to the contributors, who by this notice are assured of this offices' appreciation of their ready offer of aid, in what we believe should have been the course followed, in the main, possibly excepting the Chiropractic matter, which might be left for the time being to demonstrate itself in action.

In closing this matter, we desire to once more offer the suggestion: No success is or ever will be possible, with a divided membership. As long as contrary individuals insist in taking divergent course of non-cooperation, just that long will we be impotent as an organization. We cannot refrain from again mentioning here, the impelling force of self interest in contradiction to that involving all of us, not particularly touching the individual. County secretaries and individuals are found using the greatest care and expedition in remitting for members who face or may face civil attack for malpractice, in one case very urgent means were used, followed by notice of suit in less than a week.

In this matter only of relative personal concern, only the concern of the mass and not the individual, more apathy, neglect or lack of interest can be conceived. The ever recurring suggestion is that maintenance of such activities is hardly worth the trouble, if it is only to be the means of constantly crying the selfishness of the member. These admissions are disheartening and are made with the greatest personal regret on the part of the writer, but it is thought best that all our members should be given opportunity to know at least some of the outstanding conditions.

This is SELAH.

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## FACTS ABOUT McALESTER, THE ANNUAL MEETING PLACE

This city is the financial, business, cultural, and executive center of the State's greatest coal deposits, which is also one of the largest in the United States, its vast deposits barely yet touched, and which, geological experts state, are practically inexhaustable. The mining of coal has been going on in this district on a large scale for many years, resulting in bringing a large laboring population to the country and building up business necessities demanded by the industry. This great wealth was the direct cause of building the Choctaw railroad, connecting McAlester with the Frisco system at Wister, said to be one of the costliest pieces of construction ever performed up to that time. The influx of population, many mining catastrophies and industrial injuries stimulated construction and maintenance of hospitals long before they existed elsewhere in the Indian Territory, this advance being the case for many years until Oklahoma City, Tulsa, Muskogee, and other cities increased their populations. McAlester has from the first been the Masonic Mecca for members of that fraternity and stands first in importance as the headquarters and home of Masonic activities. The city is a place of beautiful

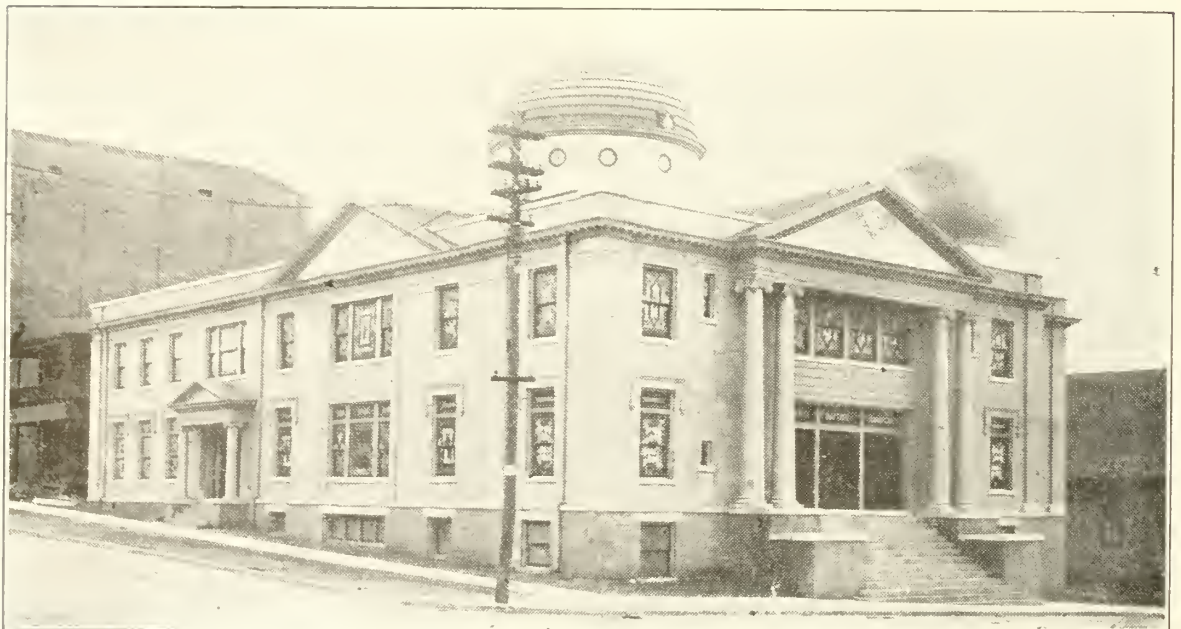
homes, occupied by a citizenship excelling in culture, social and educational attainments.

The pictures reproduced herewith are only a few of the establishments indicating the importance of McAlester as an industrial,

social and fraternal center. For years (long before many of our present modern cities existed) McAlester was the real center of great wealth and home of people of unusual attainment in cultural and social worth.



Scottish Rite Cathedral. Reunions are held four times a year. McAlester caring for as many as 1200 guests at one time.



First Baptist Church, where all sections, exhibits, registration, the general and open meeting of the Oklahoma State Hospital Association will be held. It is more than ample and is one of the largest and finest buildings among Oklahoma's churches.



### *Editorial Notes—Personal and General*

**Dr. V. R. Hamble**, formerly of Homestead, has located in Okeene.

**The American Medical Association** meets in Boston June 6 to 10th.

**Dr. I. L. Cummings**, Ada, has returned from a visit to Chicago clinics.

**Dr. E. E. Rice**, Shawnee, attended the Mayo Clinic for a short time in April.

**Dr. B. T. Bitting**, Enid, has returned from special work at Tulane in obstetrics, diseases of women and children.

**Dr. C. M. Rosser**, Dallas, will deliver an address before the special meeting of the Hospital Section at McAlester, May 18th.

**Tulsa** may secure another hospital if tentative plans of Oklahoma Baptists mature. The matter is under consideration by that organization, their leaders declaring that such is a logical need for that city.

**Dr. C. F. Loy**, McAlester, has been commissioned as Acting Assistant Surgeon, U. S. Public Health Service, and will represent the service at McAlester in rendering attention to beneficiaries of the Bureau of War Risk Insurance.

**Drs. Bombarger, Dovell and Rollins**, Paden, entertained the Okfussee County Medical Society, April 7th, tendering a banquet to the visiting physicians. Out of town guests were present from Prague, Shawnee, Okemah, Stroud and Castle.

**Memphis Hospital Medical College** reunion banquet is planned for the evening of May 18th at McAlester. Everyone desiring to attend are requested to communicate with Dr. J. M. Byrum, Shawnee, in order that arrangements may be made for their care.



One of the numerous coal mines near McAlester, which city is the center of one of the largest fields in the United States. It is planned to arrange for a trip to points of such interest as this, which may be reached either by automobile or the extensive interurban system connecting them with McAlester.

**Dr. and Mrs. M. P. Springer**, Tulsa, announce the birth of a daughter born March 29, 1921. The young lady was christened Betty Jane.

**The Weeden Hospital**, Duncan, announces the appointment of Miss Anna H. Johnson, formerly of the Mayo Clinic, as Superintendent of nurses.

**Guthrie's Citizen Committee** has announced that the fund of \$15,000.00 for erection of a nurses' training school home has been raised. Drs. A. A. West and L. A. Hahn are on the list for \$2,000.00 each.

**Bartlesville** has let a contract to a Tulsa firm for the erection of a municipal hospital, which will cost \$116,789, exclusive of plumbing, electrical work, etc.; total cost will be \$250,000, including equipment.

**University Hospital**, Oklahoma City, will not be closed is the announcement after conference with George W. Clark, Chairman of the State Board of Affairs, and Regents of the institution. No statement was made as to the means to be adopted to bridge the lack of necessary appropriations left by failure of legislative appropriations.

**The House of Representatives**, before adjournment, cut the Senate Bill appropriating \$800,000 for soldier relief, erection of hospital at Oklahoma City to \$500,000, then adjourned without passing their reducing amendment in any form. Howard B. Fell, Ardmore, state commander of the legion, stated he was not entirely satisfied with the amendment, though conceded that it was probably the best to be obtained. We are not advised as to his statement on the end results.

**"Wanted—A Doctor,"** announces the Presbyterian Board of Foreign Missions, 156 Fifth Ave., New York. The specifications demand a medical missionary, under 35, with a knowledge of psychiatry, or willing to enter special training in the care of the insane for a year or two to fit himself for the special task of caring for Chinese patients, at the same time cooperating in every manner in promulgating Christian principles. The opportunity offers an unusual means of participating in an unusual work in a field offering greater diversity of experiences than any other existing. The assignment is virtually permanent for the qualified volunteer.



## DOCTOR WILLIAM JOHNSON WITT

Dr. W. J. Witt, Colony, Okla., died at Clinton March 30, 1921, after a short illness from peritonitis following appendicitis.

Dr. Witt was born at Tupelo, Miss., Jan. 29, 1888, receiving his literary education at Tupelo and Port Gibson, Miss., his medical degree from the University of Tennessee, Memphis, 1910. He practiced at Brown's Wells, Miss., Thatcher and Crown Point, New Mexico, after which he located at Colony. Interment was made at his old home, Tupelo, Miss., six physicians, all Shriners, acting as pall bearers. He was a member of the Chi Zeta Chi, Mason, Knight Templar, Shriner, and of other fraternal orders. Married June 1, 1915, to Miss Frances Miller, she and his son William J. Jr., are his immediate survivors.

His untimely death on the threshold of a useful career is mourned by many friends and intimate associates who knew and esteemed him as a personal friend, man and citizen.

Dr. Earl D. McBride, Oklahoma City, announces the dismissal by the plaintiff of the \$25,000.00 suit alleging malpractice. So it goes, in a few words there is stricken from the docket, a matter conceived in ignorance, furthered by meanness, and interred by the hand of oblivion.

Dr. Winnie M. Sanger, Oklahoma City, whose work is connected with the City's schools, addressed the members of the Women's Dinner Club, April 1st, declaring that "eighty per cent of contagious diseases were caught above the collar" and emphasized the importance of clean throats and mouths.

The Clinton Tuberculosis Sanitarium buildings have been formally accepted by the State Board of Affairs and Dr. D. Long of the Tuberculosis Bureau, State Board of Health. Only sixteen patients can be accommodated in the cottages now completed and due to lack of appropriations for maintenance by the last legislature, none can be accepted until provision is made for them.

The Medical Association of the Southwest will hold its 16th annual meeting in Kansas City, Mo., according to Dr. F. H. Clark, Secretary, the February Bulletin announcing that the Missouri Valley Medical Association will convene with the Southwest at the same time in a joint meeting. The date not yet announced, is hoped to be arranged for the same week the American Legion convenes its National meeting.

St. John's Hospital, Tulsa, secured pledges and contributions totalling \$152,180 as a result of an organized effort to raise necessary funds for completion. The women workers in five days securing more than \$13,000.00; the Sinclair interests contributing \$15,000.00, and office employees of the Cosden Company sending \$504.00 as a cash collection. Many Tulsa physicians actively cooperating in the work. Dr. A. W. Pigford, President of the Tulsa County Society, proposing a rising vote of thanks to the executive committee chairman, Mr. A. V. Davenport, the associate manager, Mr. A. E. Braniff, and their coworkers on the committee. Mrs. C. J. Hindman directed the work of the women workers. Mr. Dave Connolly wired from New York that \$15,000.00 had been contributed by the only two men he had solicited and that his efforts would be continued in Pittsburgh.

Oklmulgee County Society announced its "Spring Get Together Meeting" for April 11th, "teasing the boys" with the information that "Luncheon will be served, followed by cabaret singing and 'fiddling', after which the Regular Program." We regret inability to respond to the several cordial invitations to attend, but venture the opinion that the "front" end of that meeting was, for the

nonce, attended to the maximum. The Program: "Intestinal Paresis of Children," Dr. O. O. Hammond, Okmulgee. Discussion opened by Dr. O. S. Burrow, Okmulgee. "Gastric Ulcer," Dr. I. W. Bollinger, Henryetta. "The Other Fellow," Dr. E. C. Myers, Okmulgee. "A little nonsense now and then is relished by the wisest men." (This is not to be taken as a reflection upon Dr. Myers that his offering was "nonsense" in any sense of the word.) "Epidemic Encephalitis," Dr. C. J. Fishman, Oklahoma City. Discussion opened by Dr. Harry Boswell, Henryetta.

Dr. Thos. M. Haskins, Tulsa, is experiencing the sensation of acting as target for attorneys' attacks via the alleged malpractice route. Goldie Dunham alleges Dr. Haskins ruined her knee which was worth \$25,000.00. Barely had that news soaked in when another claimant appeared, Mrs. M. J. DeVine, alleging that Dr. Haskins by performance of an operation upon her had "ruined her life", all of which alleged malpractice was worth \$100,000. The Judge and the jury will now settle the matters. It is of possible interest to recall that Dr. Haskins recently appeared in Federal Court in Muskogee as a witness for a Greek plaintiff who sued two Tulsa physicians and the Oklahoma Hospital, Tulsa. In that case Federal Judge Dyer promptly decided the Greek and his witnesses had said enough to exculpate the defendants, that it was unnecessary to hear more than the statement of the alleged injuries, so he figuratively "showed them the door."

## KANSAS CITY SPECIAL TO A. M. A.

The physicians of Kansas City are counting on getting a special Pullman through to Boston for the A. M. A. meeting. There will be no extra charge for reservations on this car. Anyone interested please send in their names and the number in their party to Secretary, Jackson County Medical Society, General Hospital, Kansas City, Mo. Data on routes and schedule will be sent them when decided on.

## IN HONOR OF MME. CURIE

The June issue of the *Medical Review of Reviews* will be a special radium number dedicated to Mme. Curie. The issue will consist exclusively of articles on radium and its uses, written by the most prominent radiologists in the United States and Canada.

Copies will be sent complimentary to every physician interested in the uses of radium and any readers of this item who desire that issue may have it by asking for it from the *Medical Review of Reviews*, 51 East 59th Street New York.

## ANESTHETICS COMPARED

Comparing the local anesthetics most frequently used in the current Year-Book of Anesthesia and Analgesia, Sollman finds procaine and cocaine equally as efficient for injection intracutaneously. Beta-eucaine is only about one-half as efficient; quinine-urea one-fourth.

The showing is interesting so far as it goes, but further, when considering the two best anesthetics, one must know that procaine is only about one-seventh as toxic as cocaine. Also, it is less irritating. That is why careful operators prefer it. As between the two, nobody mindful of the mishaps chargeable to cocaine, will hesitate a minute questioning which to use.

Procaine (introduced as novocaine by alien patentees) is now made by the Abbott Laboratories, Chicago. They offer both tablets and ready-prepared solutions in ampules. Those interested should write for the new 1921 price list now being mailed out by the company, an 18 page booklet covering the application of procaine in minor surgery is also available on request.

PROGRAM OF THE TWENTY-NINTH ANNUAL  
MEETING OF THE OKLAHOMA STATE  
MEDICAL ASSOCIATION, McALESTER  
MAY 17-18-19, 1921.

**REGISTRATION:** Every member should register immediately upon arrival at the registration desk, basement, First Baptist Church. Membership for 1921 only entitles one to register. This is verified by consultation of the roster of membership, made up from reports of your county secretary. If you have not received certificate for 1921 advise the Secretary or else, also take up the matter with your county secretary. Date of payment of your dues, to whom paid, in what form, check or otherwise, endorsement on your returned check, etc. Some errors are unavoidable despite the greatest care. We hope to maintain them at the minimum. Telephone No. 943.

**PAYMENT OF YOUR DUES:** Remittance by your secretary should be closed now. Neglect of this small matter each year entails upon the registrars unwarranted imposition at a time when every moment is demanded by the many needs of the meeting. Confusion and error inevitably follows this neglect, as more than one person unfamiliar with the matter must be relied upon to do the work. **ATTEND TO THIS NOW AND HELP YOUR ASSOCIATION HAVE A PERFECT MEETING.** Do not argue with registrars over mistakes, see the secretary who holds your record. Cards will be used for registration. They will be immediately filed alphabetically, containing your name, address, hotel, etc., any message or emergency concerning you will be promptly handled.

**VISITING PHYSICIANS** from other states may register, indicating name, address and society to which they belong. They will be given privilege of attending the sections, and probably, the courtesy of discussing papers will be accorded.

Entrance to registration, exhibits, every meeting, will be only by way of the basement entrance, south side of the building. Doors from the upper floors will be used for exit only. This should be borne in mind to avoid insistence that individual exceptions be made. It is hoped that orderly and rapid delivery of attendants will be the result.

**PAPERS** read at this meeting **ARE THE PROPERTY OF THE ASSOCIATION**, failure to leave them with the section officers or reporters results in wasteful correspondence, total loss at times, always delay and places unnecessary work upon your officers at a time when everything is far behind schedule. Help avoid such waste.

Proof of your paper, price of reprints, will be sent you before publication. Papers cannot be published in the order read, but must be grouped to meet certain needs believed to warrant that system.

**HOUSE OF DELEGATES:** Will meet at 2 p. m., Tuesday, May 17th. Delegates only may participate in its meetings. Delegates should have their credentials ready to present to the Credentials Committee of the House so they will be able to quickly make up their rolls.

Members desiring to present matters to the House should have their propositions carefully typed in advance if possible, several carbon copies of it will save copying and consequent errors. It should be remembered that the House, only transacts business and matters concerning the Association's affairs not within the scope of the sections, which deal with the scientific work of the body.

Other meetings of the House will be announced by the President.

**THE COUNCIL:** Will meet at 11:00 a. m. Tuesday, May 17th, and thereafter as may be necessary to transact its work. Every matter of business should be referred to this body in order that the House of Delegates may be relieved as much as possible and its members free to transact other matters or attend sections. Presentation of any matter before it should likewise be typewritten and in several copies.

**ELECTION OF OFFICERS:** Will occur on the morning of the last day, by Constitutional requirement, must be the first matter considered and disposed of. The following are to be elected:

President-Elect; First, Second and Third vice-presidents; Councilor; 1st District, comprising the counties of: Texas, Beaver, Cimarron, Harper, Ellis, Woods, Woodward, Alfalfa, Major, Grant, Garfield, Noble and Kay. Present incumbent, Dr. G. A. Boyle, Enid. District 6, comprising the counties of Okfuskee, Hughes, Pittsburg, Latimer, LeFlore, Haskell and Sequoyah. Present incumbent, Dr. L. C. Kuykendall, McAlester.

Delegate to the A. M. A. to serve for the years 1922-23. Meeting place for 1922.

Delegates only are empowered to vote.

**THE GENERAL MEETING:** Auditorium, First Baptist Church, Tuesday, May 17, 8:00 p. m.

Call to order by the President, Dr. G. A. Boyle, Enid. Invocation, Reverend W. M. Wright, First Baptist Church, McAlester.

Address of Welcome, Dr. R. K. Pemberton, Mayor of McAlester.

Response, Dr. R. M. Howard, Oklahoma City.

Report and Eulogies by the Necrology Committee. Drs. C. W. Heitzman, Chairman of the Committee, and LeRoy Long will deliver tributes to the memory of Dr. John W. Duke, who died as President of the Association.

Address of the President, "The Present Status of the Oklahoma Physician," Dr. G. A. Boyle, Enid.

Address—"Fraternal Greetings From the Texas State Medical Association," Dr. J. M. Hooks, Delegate, Paris, Texas.

#### SECTION ON PEDIATRICS AND OBSTETRICS

*Dr. W. M. Taylor, Chairman, Oklahoma City.*

*Dr. John Paine Torrey, Secretary, Bartlesville*

Chairman's Address—"The Newborn."

1. "Psychology of Child-Bearing Period."—Dr. J. A. Hatchett, El Reno.  
Discussion opened by Dr. R. E. Looney, Oklahoma City.
2. "Syphilis of the Newborn."—Dr. R. M. Anderson, Shawnee.  
Discussion opened by.....
3. "Toxemia of Pregnancy."—Dr. W. A. Fowler, Oklahoma City.  
Discussion opened by Dr. Wann Langston, Oklahoma City.
4. "A Rare Complication of Measles, Bullous Eruption, Case Report."—Dr. J. Raymond Burdick, Tulsa.  
Discussion opened by Dr. W. M. Taylor, Oklahoma City.
5. "Points of Interest in the Lower Uterine Segment and Cervix."—Dr. Geo. R. Osborn, Tulsa.  
Discussion opened by Dr. J. Winter Brown, Tulsa.
6. "Some Surgical Aspects of Some Congenital Malformations in Children."—Dr. A. A. Will, Oklahoma City.  
Discussion opened by.....
7. "The Obstetrical Satchel and Home Conduct of Labor."—Dr. C. V. Rice, Muskogee.  
Discussion opened by Dr. W. W. Wells, Oklahoma City.
8. "The Problems of the General Practitioner with Second Summer Babies."—Dr. R. K. Pemberton, McAlester.  
Discussion opened by Dr. T. H. McCauley, McAlester.
9. "Obstetrics in the Country."—Dr. J. C. Warkins, Checotah.  
Discussion opened by Dr. G. W. West, Eufaula.
10. "The Doctor, The Parent, The Child."—Dr. Ivadell Rogers, Pryor.  
Discussion opened by Dr. Geo. W. Tilly, Locust Grove.

11. "The Early Diagnosis of Diphtheria and the Significance of the Schick Test."—Dr. A. L. Salomon, Oklahoma City.  
Discussion opened by Dr. Leila E. Andrews, Oklahoma City.
12. "Every Day Problems in Obstetrics."—Dr. J. L. Adams, Pryor.  
Discussion opened by Dr. W. C. Bryant, Choteau.
13. "Infant Feeding."—Dr. J. L. Day, Norman.  
Discussion opened by Dr. John P. Torrey, Bartlesville.

#### SECTION ON EYE, EAR, NOSE AND THROAT

*Dr. L. M. Westfall, Chairman, Oklahoma City*

Chairman's Address—"Service and Efficiency".

1. "Vitreous Opacities."—Dr. W. Albert Cook, Tulsa.  
Discussion opened by Dr. R. O. Early, Oklahoma City.
2. "Conservative Intra-Nasal Surgery."—Dr. H. Coulter Todd, Oklahoma City.  
Discussion opened by Dr. M. K. Thompson, Muskogee.
3. "Importance of Early Recognition of Hyperthyroidism."—Dr. R. M. Howard, Oklahoma City.  
Discussion opened by Dr. A. W. Roth, Tulsa.
4. "The Frontal Sinuses."—Dr. L. C. Kuyrekendall, McAlester.  
Discussion opened by Dr. D. D. McHenry, Oklahoma City.
5. "The Pneumococcus in the Eye, Ear, Nose and Throat."—Dr. Edward F. Davis, Oklahoma City.  
Discussion opened by Dr. C. M. Fullenwider, Muskogee.
6. "Focal Infection."—Dr. C. B. Barker, Guthrie.  
Discussion opened by Dr. E. S. Ferguson, Oklahoma City, and Dr. R. W. Dunlap, Tulsa.
7. "Malignonciér of the Eye" Dr. J. E. Davis, McAlester.  
Discussion opened by Dr. A. C. McFarling, Shawnee.

#### SECTION ON GENERAL MEDICINE, NEUROLOGY, PATHOLOGY AND BACTERIOLOGY

*Dr. Ray M. Balyeat, Chairman, Oklahoma City*

*Dr. Horace T. Price, Secretary, Tulsa*

Chairman's Address—"Diagnosis and Treatment of Essential Vascular Hypertension."

1. Symposium on Nephritis:
  - (a) "Clinical Nephritis."—Dr. Lea A. Riely, Oklahoma City.  
Discussion opened by Dr. Chas. W. Fisk, Kingfisher.
  - (b) "Renal Function Tests in Nephritis."—Dr. Wann Langston, Oklahoma City.  
Discussion opened by Dr. John A. Roddy, Oklahoma City.
  - (c) "Renal Pathology in Nephritis."—Dr. L. A. Turley, Norman.
2. "Epilepsy: Its Causes and Treatment."—Dr. J. J. Gable, Norman.  
Discussion opened by Dr. F. M. Adams, Vinita.
3. "Sinusitis as Seen by the General Practitioner."—Dr. F. T. Gastineau, Pawnee.  
Discussion opened by Dr. P. F. Erwin, Wellston.
4. "Case Selection for Tuberculin Therapy."—Dr. T. H. McCarley, McAlester.  
Discussion opened by Dr. H. T. Price, Tulsa.
5. "The Problems of Heart Troubles from the Standpoint of the General Practitioner."—Dr. Jno. H. Scott, Shawnee.  
Discussion opened by Dr. J. A. Munn, McAlester.

6. "Gastric and Duodenal Ulcer."—Dr. Ellis Lamb, Clinton.  
Discussion opened by Dr. A. G. Cowles, Ardmore.
7. "The Relation of Anaphylaxis to Asthma, Hay Fever, and Eczema."—Dr. C. A. Dillon, Tulsa.  
Discussion opened by Dr. Earl L. Yeakel, Shawnee.
8. "A Plea for a More Thorough Examination in Diseases of the Chest."—Dr. J. W. Nieweg, Duncan.  
Discussion opened by Dr. L. J. Moorman, Oklahoma City.
9. "Early Recognition of Gastric Carcinoma."—Dr. A. W. White, Oklahoma City.  
Discussion opened by Dr. Ross Grosshart, Tulsa.
10. "An Outline of the Routine Examination of the Heart, and Great Vessels."—Dr. F. J. Wilkemyer, Muskogee.  
Discussion opened by Dr. D. D. Paulus, Oklahoma City.
11. "Simplified Methods of Finding Suitable Donors for Blood Transfusion."—Dr. Gayfree Ellison, Norman.  
Discussion—General.
12. "Adventures in Diagnosis."—Dr. Benj. H. Brown, Muskogee.  
Discussion opened by Dr. W. A. Tolleson, Eufaula.

#### SECTION ON GENITO-URINARY DISEASES, DERMATOLOGY AND RADIOLOGY

*Dr. Rex Bolend, Chairman, Oklahoma City*

*Dr. E. L. Cohenour, Secretary, Tulsa*

Chairman's Address—Dr. Rex Bolend, Oklahoma City.

1. "Diagnosis and Treatment of Pyogenic Infections of the Kidney."—Dr. John C. Mraz, Oklahoma City.  
Discussion opened by Dr. James Rogers, Tulsa.
2. "Vaccine Therapy in Gonorrheal Infections."—Dr. E. L. Cohenour, Tulsa.  
Discussion opened by Dr. C. J. Brunson, McAlester.
3. "Hydronephrosis."—Dr. J. Hoy Sanford, Muskogee.  
Discussion opened by Dr. A. G. Cowles, Ardmore.
4. "The Prostate and Seminal Vesicles as Foci of Infection with Constitutional Manifestations."—Dr. C. B. Taylor, Oklahoma City.  
Discussion opened by Dr. Curtis R. Day, Oklahoma City.
5. "Tumor Growths in the Bladder."—Dr. J. H. Hays, Enid.  
Discussion opened by Dr. W. J. Wallace, Oklahoma City.
6. "Treatment of Prostatic Enlargement with Special Consideration of the Pre-prostatic Stage."—Dr. W. J. Wallace, Oklahoma City.  
Discussion opened by Dr. Julius Frischer, Kansas City.
7. "The X-Ray in Dermatology."—Dr. J. C. Johnston, McAlester.  
Discussion opened by Dr. M. M. Roland, Oklahoma City.
8. "Etiology, Pathology, Prognosis and Treatment of Acne."—Dr. Charles H. Ball, Tulsa.  
Discussion opened by Dr. A. L. Stocks, Muskogee.
9. "Etiology, Diagnosis and Treatment of Trichophytosis."—Dr. Chas. J. Woods, Tulsa.  
Discussion opened by Dr. E. S. Lain, Oklahoma City.
10. "Differential Diagnosis of Pityriasis Rosea and the Secondary Syphilide."—Dr. M. M. Roland, Oklahoma City.  
Discussion opened by Dr. Chas. H. Ball, Tulsa.
11. "Recent Experimental and Clinical Surgery of Obstetrical Testicle."—Dr. Victor D. Lespinasse, Chicago.

#### SECTION ON SURGERY AND GYNECOLOGY

*Dr. P. P. Nesbitt, Chairman, Muskogee*

*Dr. Victor M. Gore, Assistant to the Chairman, Clinton*

Chairman's Address—Dr. P. P. Nesbitt, Muskogee.



1. "The Frequency of Acute Intestinal Obstruction Following Abdominal Operations—Stressing the Importance of Early Recognition of the Condition."—Dr. Frank H. McGregor, Mangum.  
Discussion opened by Dr. Fred S. Clinton, Tulsa.
2. "Unusual Physical and Clinical Findings in Acute Peritoneal Involvement."—Dr. M. M. De Arman, Miami.  
Discussion opened by Dr. Horace Reed, Oklahoma City.
3. "The Care of Acute Peritonitis."—Dr. J. M. Byrum, Shawnee.  
Discussion opened by Dr. James L. Shuler, Durant.
4. "Appendicitis, With Special Reference to the Female."—Dr. E. B. Dunlap, Lawton.  
Discussion opened by Dr. Raymond H. Fox, Altus.
5. "Pelvic Infections."—Dr. L. S. Willour, McAlester.  
Discussion opened by Dr. E. E. Rice, Shawnee.
6. "Thrombosis, Pulmonary Infarction and Embolism Following Gynecological Operations."—Dr. Fenton M. Sanger, Oklahoma City.  
Discussion opened by Dr. W. E. Dicken, Oklahoma City.
7. "The Interstitial Transplantation of the Round Ligaments for Restoration of the Retroverted Uterus."—Dr. McLain Rogers, Clinton.  
Discussion opened by Dr. F. L. Watson, McAlester.
8. "Functional Disturbances of the Nervous System Due to Pelvic Reflexes and Anomalies of the Internal Secretions."—Dr. Ross Grosshart, Tulsa.  
Discussion opened by Dr. W. H. Livermore, Chickasha.
9. Symposium on Cancer:
  - (a) "Carcinoma, Cancer, Autogenesis of"—Dr. H. A. Lile, Cherokee.
  - (b) "Early Diagnosis the First Step in the Curability of Cancer."—Dr. Arthur S. Risser, Blackwell.
  - (c) "The Operative Treatment of Cancer."—Dr. J. Hutchings White, Muskogee.
  - (d) "Radium and X-Ray Treatment of Malignant Growths."—Dr. Everett S. Lain, Oklahoma City.
  - (e) "Cancer Deaths, Why So Many?"—Dr. G. A. Wall, Tulsa.  
Discussion of papers on Cancer opened by Dr. LeRoy Long, Oklahoma City. Special discussion of Dr. Lile's paper by Dr. T. B. Hinson, Enid.
10. "Fractures: End Results From the Treatment Point of View."—Dr. George S. Foster, Manchester, N. H.  
Discussion opened by Dr. A. P. Gearhart, Blackwell.
11. "Broken Bones."—Dr. S. N. Mayberry, Enid.  
Discussion opened by Dr. W. K. West, Oklahoma City.
12. "Treatment of Paralysis Attending Minor Nerve Injuries. Case Report."—Dr. Ralph V. Smith, Tulsa.  
Discussion opened by Dr. T. M. Aderhold, El Reno.
13. "Backache from an Orthopedic Standpoint."—Dr. Earl D. McBride, Oklahoma City.  
Discussion opened by Dr. Victor M. Gore, Clinton.
14. "Congenital Deformities of the Mouth and Face."—Dr. Curt von Wedel, Oklahoma City.  
Discussion opened by Dr. I. B. Oldham, Muskogee.

#### PROGRAM, OKLAHOMA STATE HOSPITAL ASSOCIATION

(Under Auspices of the State Association Hospital Committee)

Tuesday, 8:00 P. M.

Invocation.

Address by the President, Dr. Fred S. Clinton, Tulsa.  
"More Hospitals, Bigger and Better Hospitals, A Health Necessity."—Dr. Chas. M. Rosser, Professor of Surgery, Baylor University College of Medicine, Dallas, Texas.

"Some Remarks on the Functions of the Hospital."—Dr. LeRoy Long, Dean and Professor of Surgery, Oklahoma University Medical School, Oklahoma City.

#### NEW BOOKS

Under this heading books received by THE JOURNAL will be acknowledged. Publishers are advised that this shall constitute return for such publication as they may submit. Obviously all publications sent us cannot be given space for review, but from time to time books received, of possible interest to Oklahoma physicians, will be reviewed.

#### THE DISEASES OF INFANTS AND CHILDREN

By J. P. Crozer Griffith, M. D., Ph. D., Professor of Pediatrics in the University of Pennsylvania. Two octavo volumes totaling 1542 pages with 436 illustrations, including 20 plates in colors. Philadelphia and London: W. B. Saunders Company, 1919. Cloth, \$16.00 net.

In preparation of this work the author states that it has been his effort to incorporate such review of medical pediatrics as deemed desirable without extension to the encyclopedic. Inclusion of such special branches as pediatricians encounter in their work is made, including surgery and the allied specialties incident to their tasks. References to conclusions of other writers, when made is also noted in foot notes, in order that access to the complete article may be made easily available. Temperature-charts, photographic and other illustrations are voluminous, are mostly original, excepting in such cases as were unobtainable, or where superior ones were found in the works of other writers. Where dosage is given the English systems are used, invariably accompanied by the metric, which latter are in parentheses.

The first volume is divided into two divisions, the first containing twelve chapters on general subjects; division two containing a section on Diseases of the New-Born with fourteen chapters; a section on Infectious Diseases with twenty chapters; a section on General and Nutritional Diseases with ten chapters; and a section on Diseases of the Digestive System with ten chapters.

The second volume, seven sections on the subjects of Diseases of the Respiratory System; the Circulatory System; Genito-Urinary System; Nervous System; Muscles, Bones and Joints; Blood and Lymphatic Glands; Ductless Glands and Internal Secretions and Skin, Eye and Ear, each of which is subdivided into sections necessary for consideration of the particular phases. Forty plates in color are included, notably of which are fine reproduction of a thoroughly digested breast-milk stool; hard protein curd; the soap stool; the curdy stool; Carbohydrate and Spinach-Green stool; one plate of nine reproductions of stages of normal vaccination and the cyanotic face of congenital disease of the heart; clubbing of fingers and toes in heart disease.

Many others attest the great task involved in producing the work, which is a thorough statement of the tremendous problems of every phase of pediatrics and its allied subjects as understood by modern knowledge of our most intricate and difficult branch of practice.

#### THE SURGICAL CLINICS OF CHICAGO

Volume I, Number I, April, 1921, Octavo of 259 pages illustrated. W. B. Saunders Company, 1921, Philadelphia and London. Published Bi-Monthly. Price per year: Paper \$12.00; Cloth \$16.00.

This issue of the Clinics, devoted to the efforts of a group of the best men in one of America's greatest surgical and medical centers, reflects the admitted ability of what may be rightly termed, our aristocracy of medicine, the Philadelphia profession.

The introduction is presented by the Dean of our profession, W. W. Keen, Emeritus Professor of Surgery, Jefferson Medical College. In his entertaining manner he sketches the progress of medicine from his student days to the present, noting the sad lack of equipment and curriculum of yesterday in comparison with that of today. "No laboratories, blood examination, knowledge of chemistry," hut, "percussion? Auscultation?" "Yes," but not with the "refinements of today," no examination of the urine—"Palpation?" "Yes, and often far more thorough than today." Which reminds us that with our single-mindedness, our engrossment over laboratory findings, we do fail in appreciation of the results of fineness on the clinicians keenly trained observation of time worn evidences observed by tried, practical, systematic rules aged indeed, but not yet old enough to discard without our milestones of rude awakening on discovery, perhaps, that after all ours was a case of measles. A tribute to his teacher, Wier Mitchell, who "taught me how to elicit—literally to 'dig up'—the facts of the personal history no one else ever did." The "general practitioner," the "family doctor"—is after all the "backbone of the profession" but that observation is tempered with advice, on stating his lack of time to attend clinics, to "read" them.

#### CHICAGO CLINICS

J. Chalmers DaCosta, John B. Deaver, John G. Clark, C. H. Frazier, Astley P. C. Ashurst, John H. Gibbon, Chas. F. Nassau, T. Turner Thomas, John H. Jopson and George P. Muller, present their clinics in the issue. Among them, all of interest, is "Osteitis Deformans," "Lethargic Encephalitis Mistaken for Meningeal Hemorrhage" are a part of DaCosta's. "Open Reduction" of fractures of the tibia and forearm; "Incomplete Abortion;" "Herniae," among those of Ashurst. "Enchondroma" of scapulae and others by Muller. "Amputation of the Breast for Carcinoma" after Francis T. Stewart, (Annals of Surgery, Vol. 62, p. 252) is presented by John H. Gibbon with the statement that despite the fact that more incisions had been devised up to this one than for any other operation, but that they either for presentation of cosmetic results did not contain enough skin to give access to the tissues or those that did resulted in disfigurement, often disability. The "cliptic transverse" incision of Stewart, he holds to best meet the needs of the operation, both as to sufficient wide removal of pathology, nearly no disfigurement or after disability. "A Method of Applying Extension with Plaster Cast Fixation in Fractures of the Leg" by T. Turner Thomas calls for study from those whose work brings them the practical difficulties in maintaining extension and fixation in their work. Lack of space prohibits noting many other splendid presentations by contributors to this volume. It is a splendid issue.

#### Abstracts, Observations from Current Medical Literature

##### CONDUCTED BY

RADIOLOGY AND DERMATOLOGY—Dr. Chas. H. Ball, Daniels Bldg., Tulsa.  
GENERAL SURGERY—Dr. M. E. Stout, Patterson Bldg., Oklahoma City.  
ORTHOPAEDICS—Dr. Earl D. McBride, 208 Colcord Bldg., Oklahoma City.  
EYE, EAR, NOSE AND THROAT—Dr. L. C. Kuyrkendall, McAlester.  
GENERAL—INDUSTRIAL MEDICINE—PUBLIC HEALTH—Dr. L. A. Mitchell, Frederick; Dr. J. L. Austin, Durant.

##### ORTHOPAEDICS.

Earl D. McBride, M. D., Oklahoma City.

#### THE ORTHOPEDIC TREATMENT OF BURNS

Anthony H. Harrigan, N. Y., and Samuel W. Boorstein, N. Y.,

*Annals of Surgery, Vol. XLII.*

Since deformities in general can be prevented, the

orthopedic treatment of burns should be properly emphasized. Braces or plaster casts commonly used in treatment of anterior poliomyelitis, peripheral neuritis, etc., may prevent contractures. The simpler splints and appliances are the more desirable.

The methods are as follows: In burns of the front or side of the neck, a collar of felt is applied to maintain the head in the middle line with the chin directed upward. If there exists a tendency toward contraction of one side, the neck is pushed to the other, the collar is made of felt about three-quarters of an inch in thickness. The height corresponds, generally, to the length of the neck from the chin to the sternum. It is surrounded with soft felt or muslin, or other soft material. It is sewed following each dressing. Plaster or leather material may be used if more convenient. Even an ordinary stiff linen collar, with gauze beneath, may be utilized in an emergency.

In burns of the shoulder and axillae, the arm must be kept in extreme abduction, in order to prevent its being drawn toward the body to produce the so-called "bat wing" deformity. The hand may be tied in slight abduction to the head of the bed.

In case of burns at the elbow, extension of the arm is maintained by securing the trunk to the opposite edge of the bed, while the affected arm is tied to the corresponding side of the bed, or even to the adjacent bed. The body is secured to the side of the bed by passing a sheet around the chest at the level of the nipple.

In case of burns of the wrist and fingers, it is extremely important to keep the adjacent raw surfaces separated, in order to prevent adhesions. Oil silk may be applied and a plaster cast to separate the fingers. For one finger a padded tongue depressor is useful.

For burns of the hip, the feet are tied in abduction to the foot of the bed. Same may be done in case of burn of the knee. For the ankle sandbags are placed next to the sole of the foot to maintain flexion.

Other splints may be very useful if at hand. These are the Thomas splints, and Jones splints. If scar tissue has partly contracted a part, a systematic stretching should be begun and above methods carried out.

#### LUMBO-SACRAL PAIN CONSIDERED ANATOMICALLY.

G. G. Davis, Philadelphia

*American Journal Orthopedic Surgery*, December 1917, No. 12, Vol. XV

Lumbo-sacral pains may have their origin either in a comparatively small localized area, or they may proceed from a larger involved area. In the former case the cause is apt to be a traumatism—either a slow acting strain or a quick acting rupture. In the latter, the cause is apt to be rheumatoid or gouty in character, and due most often probably to infection.

In traumatic conditions the movable parts are the ones involved, i. e., the lumbar spine, the lumbo-sacral junction and the sacro-iliac articulations. The bones themselves need not be considered for fracture is rare. The muscles likewise are not often seriously injured. The remaining elements are the nerves and ligamentous structures. Since nerves exist in ligaments and fibrous tissue, traumatism gives rise to pain. Pain can likewise be produced by irritation to a free trunk nerve or ending sometimes perhaps without accompanying lesion of fibrous structures.

When the ligaments are ruptured there is pain at the site of rupture. When a nerve trunk is irritated, then the most marked pain is referred to the course or distribution of the nerve.

Nerves may be injured in two ways—one by direct displacement of the bones at the time of the injury, and the other by overstretching or tension due to an unusually extensive movement of the joint beyond normal range.

Persistent malposition producing undue tension on



nerves is also apt to produce marked irritation. For instance a man working in a standing position with his body flexed at the hips, increases the tension on the sciatic nerve, and may suffer in any part of its course.

Another factor in referred pain of nerves is the sympathetic system. The sympathetic trunks with ganglia run along the sides of the spine and between these and the spinal nerves as they emerge pass communicating branches. These are composed of both gray and white fibres and probably transmit both motor and sensory impulses. These sympathetics likewise communicate with the viscera. Consequently it is possible for pain to be referred to the lower part of the back from regions of the genito-urinary organs, the intestines, pelvic organs, etc.

His conclusions are: That localized pain is evidence of local injury. Referred pains can originate from such a multitude of sources as to render them extremely unreliable for diagnostic purpose. That the most common cause of pain is rupture of ligaments. That overstretching nerves is a cause; and finally, that displacements of various joints do occur but rarely to the extent that they demand manipulation for reduction.

From this point of view benefit should be derived from apparatus so constructed as to support, fix and limit the extent of motion of parts involved.

## OFFICERS OKLAHOMA STATE MEDICAL ASSOCIATION

President—Dr. Geo. A. Boyle, Enid.

First Vice President—Dr. Jackson Broshears, Lawton.

Second Vice-President—Dr. H. A. Lile, Cherokee.

Third Vice-President—Dr. T. T. Norris, Crowder.

Secretary-Treasurer-Editor—Dr. Claude Thompson, Muskogee.

Associate Editor and Councilor Representative—Dr. C. W. Heitzman, Muskogee.

Delegates to A. M. A.—1921, Dr. L. S. Willour; 1921-1922, Dr. L. J. Moorman.

Meeting place, McAlester, May 17, 18, 19, 1921.

## CHAIRMEN OF SCIENTIFIC SECTIONS, OKLAHOMA STATE MEDICAL ASSOCIATION, YEAR 1921.

General Medicine, Neurology, Pathology and Bacteriology.—Dr. Ray M. Balyeat, First Nat. Bldg., Oklahoma City, Chairman; Dr. H. T. Price, 303 Palace Bldg., Tulsa, Secretary.

Genito-Urinary, Skin, and Radiology.—Dr. Rex Bolend, 201-3 Security Bldg., Oklahoma City, Chairman; Dr. E. L. Cohenour, Bliss Bldg., Tulsa, Secretary.

Surgery and Gynecology.—Dr. P. P. Neshitt, Muskogee, Chairman; Dr. Victor M. Gore, Clinton, Secretary.

Section on Eye, Ear, Nose and Throat.—Dr. L. M. Westfall, 706 Am. Nat. Bldg., Oklahoma City, Chairman.

Section on Pediatrics and Obstetrics.—Dr. Wm. Taylor, First Nat. Bldg., Oklahoma City, Chairman; Dr. John P. Torrey, Bartlesville, Secretary.

State Commissioner of Health.—Dr. A. R. Lewis, Oklahoma City.

## COUNCILOR DISTRICTS

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\*This list is published bi-monthly.

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# THE JOURNAL

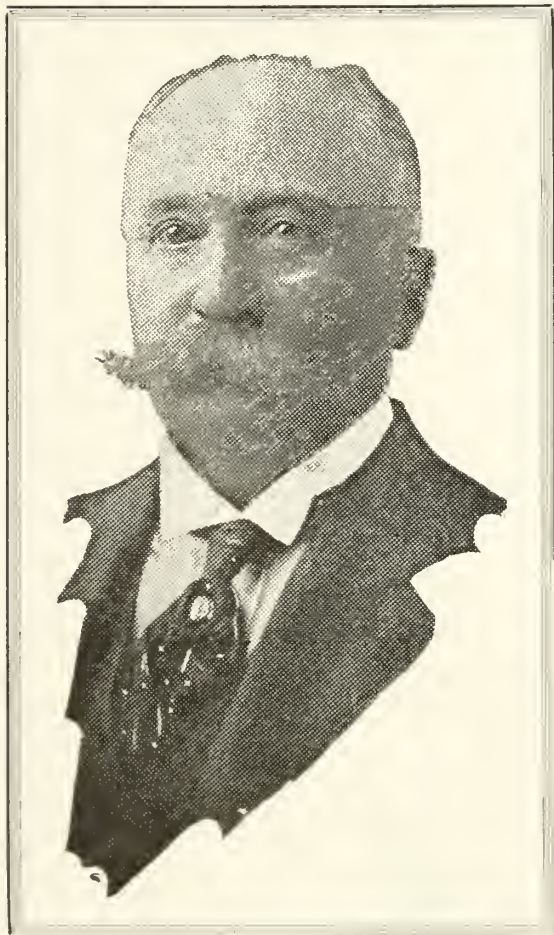
OF THE

## OKLAHOMA STATE MEDICAL ASSOCIATION

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NUMBER 6



GEORGE ARTHUR BOYLE

PRESIDENT, OKLAHOMA STATE MEDICAL ASSOCIATION  
1921-1922

(FILLING VACANCY CAUSED BY DEATH OF DR. JOHN W. DUKE, FROM OCTOBER 1920 TO MAY 1921)

Born March 13, 1857, near Ballymena, County Antrim, Ireland, of Scotch-Irish, Presbyterian parentage, coming with his parents to the United States, landing at New York in November 1865, the family going immediately to Waukesha, Wisconsin, where they bought land and engaged in farming, moving from there to Clarinda, Iowa, Pawnee City, Nebraska, and Franklin County, Kansas, successively.

Dr. Boyle was educated by a tutor at home in Ireland, attending one year of common schools in that country, completing his literary education by attendance at common and high-schools at Waukesha and in Iowa and at Amity College, College Springs, Iowa, after which he taught school in Iowa, Nebraska and Kansas, being Superintendent of schools at Marion, Kansas, filling the chair of Natural Sciences at the Kansas Normal, Paoli. Graduated from Jefferson Medical College April 5, 1887, awarded the prize in surgery and was also class chairman. He has attended many post-graduate schools, among which were those of New York and Chicago. During his professional life he has practiced at Louisburg and Winfield, Kansas, moving to Enid in April, 1904, where he has since resided. Married to Miss Annie Farnham at Paoli in 1888, who died in 1905, leaving him a daughter.

Dr. Boyle has lived a useful and active life as a physician and citizen, his present concern being that of President of the Enid Springs Sanitarium and Hospital located in Federal Springs Park, Enid, which he founded by his energy and executive ability. An active Presbyterian, member of the Masonic (32), Odd Fellows, Knights of Pythias and many fraternal orders. In the Masonic affiliation he has occupied many posts of distinction and honor, testifying to the esteem held for him by his fellowman.

In matters pertaining to medical organization both executive and scientific he has always assumed the actual leadership in Enid, Garfield County, and the entire Northwestern part of Oklahoma. In filling the vacancy caused by the untimely death of Dr. Duke he has shown keen appreciation of the problems of the Oklahoma physician, going far ahead in attempts to make of chaos a success, to replace lethargy with energy and arouse pride where indifference held sway.

## THE PRESENT STATUS OF THE OKLAHOMA PHYSICIAN.\*

DR. GEORGE A. BOYLE

ENID, OKLAHOMA

President, Oklahoma State Medical Association,  
October 1/20-May 1922.

First, I desire to most heartily thank the members of the Oklahoma State Medical Association for the great honor you have conferred upon me in electing me president of this Association. It is a position to be sought by every physician, and an honor which I appreciate far more than I have words to express.

As you all know I was elected president-elect to take the office of president in May, 1921. You can perhaps understand my surprise, as well as profound sorrow, when on October 10, 1920, I received the following telegram from our secretary, Dr. C. A. Thompson; "Death of Dr. Duke today devolves duties presidency automatically upon you." I certainly thought that Dr. Thompson was mistaken and called him up by phone and told him so.

After a great deal of correspondence with Dr. Thompson and others, he quoted me an amendment to our By-laws, Chapter 5, Sec. 5, adopted by this Association at Tulsa, May 16, 1918, stating explicitly that in case an officer removes from the State, or the office becomes vacant, then if an officer has been previously elected to hold such office, such officer shall automatically assume the duties of the office to which he has been elected.

That settled it; so I am and have been, to the best of my ability, filling the unexpired term of our honored and esteemed, but now deceased, president, Dr. John W. Duke.

I cannot help saying just a word in honor and praise of that great man, Dr. Duke. In his untimely death, the Medical Profession of the State of Oklahoma lost one of the best and noblest of all our confreres. In his death, you and I and every physician in our State have sustained an irreparable loss. Every man and woman who knew him has lost a dear friend and counsellor and the State has lost one of her most valuable and respected citizens. He was a man in every sense of the word; a man whom it was a pleasure to know because he was a friend to all who knew him. His wise counsel in all things medical shall long be remembered by us who are left to mourn his death. His calm words of wisdom in all our meetings and his noble teachings will be a light to our feet and a lamp to our path in all our efforts to achieve

the best, the highest and the noblest in our chosen profession

Right here let me state what many of you know, that an effort has been launched, and a committee appointed, of which Dr. LeRoy Long of Oklahoma City is chairman, to raise funds and supervise the direction of having made a suitable oil painting of Dr. Duke, said painting to be hung in the rooms of the Oklahoma Historical Society, State Capitol Building, Oklahoma City. It is the earnest desire of your president and the officers of the society that this fitting tribute to the memory of so great a man and physician as our deceased president be secured at the earliest possible date. I believe it is the duty, in fact it should be the privilege, of every doctor in our State to contribute to this fund. A very small contribution from every one of us, say one or two dollars, should be amply sufficient.

I wish to call the attention of this society to one of the recommendations of our last retiring president, Dr. L. J. Moorman, regarding the establishment of a committee on benefactions, said committee not only to solicit, but receive and direct the disposal of donations, gifts, bequests or endowments from men or women of wealth into medical channels, such as for the building and endowment of hospitals, sanatoria, laboratories or medical libraries; or for the purpose of carrying on scientific research.

This matter was taken up by the House of Delegates last year and a permanent commission has been appointed with Dr. Moorman as chairman. I am sure this meets with the hearty approval of every doctor in our State.

Another thing, I should like to ask how many of you, while in the performance of your professional duties, have been stopped by some officious speed cop? How many of you know that we have a law on our Statute books, giving to the physician's vehicle, when on professional work, the same privileges and rights of the road as are granted to ambulances or fire engines when on the way to extinguish a conflagration? Here is the law; "At intersecting roads or streets, vehicles approaching from the right shall have the right of way over those approaching from the left. United States mail, fire apparatus, ambulances, police patrols, and vehicles of physicians when so designated, shall have the right of way in any street or road and through any procession."

In view of this I should like to recommend to the House of Delegates the passage of a resolution or the creation of a commission whose duty would be to choose a suitable emblem or mark to designate physicians' cars or vehicles so that they might be known and recognized as such, thus saving trouble to our speed cops

\*President's Address Twenty-Ninth Annual Meeting, Oklahoma State Medical Association, McAlester, May 17-19, 1921.



and annoyance to ourselves when hurrying to an emergency case or any other important professional duty.

I know it is customary and very fitting upon the occasion of our annual meeting to recount the recent advancements or discoveries or achievements in the science and art of medicine during the year that has past. However, tonight, I shall say but little along this line, but rather take up a few minutes of your time to discuss the present status of the Oklahoma physician from a different viewpoint.

During the great World's War, and since the war, most of our work was influenced to a greater or less extent by the work done by those in actual service. Not only in surgery but also in internal medicine we were taught many valuable and lasting lessons. The lessons learned by such a vast experience in the prevention and cure of tuberculosis, typhoid fever, influenza and venereal diseases, in fact all along the lines of medical practice have made a deep and lasting impression upon our work. The uses of serums and bacterins, and of advanced methods along every line of medical practice will influence and direct our work for many years to come.

I need not tell you that the Oklahoma doctor is up to the minute in the knowledge and application of anything and everything that is new and useful in the practice of our noble profession. We can and do point with pride to the professional work of the members of our Oklahoma State Medical Association.

Another result of the great war is the stimulus which it gave to team work in the practice of medicine. Of course there were many clinics and groups of medical men organized before the war, but during the war so many thousands of physicians were associated together in base hospitals, field hospitals as exemption boards etc, and each man working as a specialist, that they were forced to see incalculable value of such organized team work. No wonder that, when they came home and entered civil practice again, they began to associate themselves together - to organize Clinics or groups for mutual benefit and protection; to better enable themselves to alleviate human suffering, to relieve and cure the many ills that human flesh is heir to; and last, but not quite least, to increase the remuneration and add to the emoluments so necessary to the average Oklahoma physician.

And now in all our larger cities, and in many of our smaller towns, we find these groups or clinics formed, hospitals organized as well as thoroughly equipt laboratories. The result is there are but few physicians in Oklahoma, even in the most remote rural districts, who do not have access to these invaluable aids to diagnosis and treatment.

There is very little excuse now in Oklahoma for any obscure case or any doubtful disease not having careful, painstaking examination, diagnosis and treatment.

We do not expect many of our physicians to engage in original research work because such work requires much time and almost unlimited resources. The average physician is a man of limited financial means; he needs all of his time and most of his money to feed, clothe, house and educate his family. Consequently, he cannot do much research work.

I understand that several Oklahoma doctors have been very successful in oil speculations—that filthy lucre in the form of filthy looking oil is rapidly filling their coffers. Let us hope that some of these lucky doctors may devote their time to original research, and that not only Oklahoma, but the whole world, may be benefited by their new discoveries in medicine or surgery.

Another line of work, really medical work too, which received a great stimulus from the Great War is Public Health work. Every doctor in our State is or should be interested in sanitation and the physical examination of our school children - which summed up means prevention of disease, healthier children and better citizens. I am afraid that we do not take as much interest in this work as we should.

Our Garfield County Public Health Association meets at least once a month. Several of our doctors are members, but I have seldom seen more than two of them at a meeting, and they had to be repeatedly called up by phone to get them out at all. This is not as it should be. We ought to attend these meetings and help in the splendid work of prevention and cure of tuberculosis and venereal diseases, as well as correcting defects and preventing and curing diseases among our school children.

And now what shall I say of the present status of the Oklahoma doctor along the lines of organized medicine? I fear I can not point with much pride to our action along legislative lines in controlling certain cults - or so called modes of treatment of disease. Every doctor in Oklahoma knows, or should know, about Senate bill No. 111, passed by our State Legislature in 1917. He also knows that said bill was referred back to referendum vote of the people. He knows, too, that if we had all gotten out and worked, if we had explained to our patrons and friends as we should have done, the true meaning of the referendum vote there would not be a separate Chiropractic Examining Board in Oklahoma today. Neither would there be a separate Osteopathic Examining Board.

I am perhaps guilty of sins of omission my-

self—I must say *Mea Culpa*, but I do say this: If we had all worked; if we had devoted one tenth as much time and energy to it as our worthy secretary did, then instead of some forty thousand votes in favor of chiropractic, we would have had a nice majority in favor of Bill No. 111. I am not trying to boost Dr. Thompson; but in simple justice I must say he is the most willing, most persistent, most indefatigable worker I ever saw.

During the fight in the Legislature I was perforce closely associated with him, and I know whereof I affirm. But there is no use crying over spilled milk. We are not crying at all. We are taking our medicine. We have learned that it is hard to get concerted action among the doctors of Oklahoma. We have learned that it makes all the difference in the world whose ox is gored. We have learned that even a doctor will get up and dance when his own toes are mashed. We are recounting this now, because we may learn a few lessons from it; lessons that may be of use at some future time.

My mother used to say to us kids; "Whatever is best". Perhaps that is true; let us hope so at least. Perhaps, after all, it is best that each and every irregular, so-called medical cult should have a separate board. Time will tell.

We have not now, nor ever had, any personal fight on Chiropractic, Osteopathy, Christian Science nor any other "Pathy" or cult. We are Regular Physicians - pure and simple - and we accept the truth wherever we find it. We are proud that we are physicians and we are proud of our profession. We believe that "Every tub should stand on its own bottom" also "By their fruits, ye shall know them."

With each cult having its own examining and licensing board, none of these cults can claim a license to practice from a board of regular physicians.

Personally I have no objection to any man or woman, who has reached the age of maturity and discretion, employing any sort of practitioner. Any adult who is insane enough to commit suicide should be allowed to do so. But I do draw the line at parents allowing innocent, unreasoning, helpless infants or children to lie and suffer and die from diphtheria, scarlet fever or any other preventable or curable disease. Such practice is nothing short of willful murder on the part of said parents.

I believe that every contagious disease is not only curable but preventable. I believe that with rigid quarantine, examination of school children, public health nursing and sanitary and other public health work, measles, scarletina, mumps, scabies, chicken pox, small pox and every other contagious or infectious disease

—even tuberculosis—will finally be utterly stamped out. But this will not be done by chiropractors nor by christian scientists. It will be done by and under the direction of men and women of our own medical profession. Who ever heard of any epidemic of disease being controlled or stamped out, or even ameliorated by any of these irregular cults? These so-called practitioners object to vaccination, they object to quarantine, they object to physical examination of our school children; in fact some of them object to anything and everything our public health societies and workers are doing.

I say again I am proud to be a physician. I am glad to be a disciple of Hyppocrates, of Galen, of Wm. Harvey, of Edward Jenner, of Sir Joseph Lister, of Ehrlich, of Gorgas and a host of others, all members of our noble profession, all men who have made the world a better place for you and me - and for countless millions yet unborn to live in. These men and hundreds of others have devoted their lives to the alleviation and cure of human suffering. They did not try to tear down and detract from medical knowledge; on the contrary, they devoted their lives to the building up and adding to the sum total of medical achievement.

Since the earliest dawn of history, there always have been, and I suppose there always will be, irregular cults and sects and charlatany. Here in Oklahoma we are certainly blessed, or cursed, with many legalized sects. Human knowledge is imperfect at best. If we were all possessed with perfect medical knowledge, there would be no occasion for any of these cults.

It seems to me the best thing for us to do in Oklahoma is to study and become so proficient in the science and art of medicine that we shall all be able to cure all of our patients. Then indeed will the medical millenium have arrived. Then indeed shall there be no use for medical "pathies" or off-colored cults. Then indeed shall the regular medical roaring lion lie down with the chiropractic lamb and a little osteopathic child shall lead them.

But laying all levity aside, I want to say a few words in closing, in extenuation of the apparent or perhaps real lack of interest of so many of our members, in medical legislation.

Again referring to the great World's War; we cannot get away from its dire as well as beneficial effects. I have always said that physicians should keep out of politics; and in the main that has been true to a large extent; but the war has wrought many changes along nearly all lines of human endeavor. Every civilized nation in the world is still feeling the effects of the war. I have spoken of some of the changes and effects upon medical and public health

work; but far greater impressions have been left upon all lines of civil, religious, and industrial endeavor: nearly all of continental Europe today is or may be likened to a vast cauldron ready to boil over at any moment; even now jets of steam are spurting out from under the lid that England and France are endeavoring to hold down. Just a little more fire under the pot and the steam of radicalism, discontent, and bolshevism will forcibly push the lid off, and to use the forceful language of one of our Generals "Hell will break loose" again. What has this to do with medical legislation, for or against, in Oklahoma? Much. Your average doctor is perforce an educated man. He is usually a reading man. He simply cannot help being interested in political matters in a time like this. He cannot help being interested in such modern problems as good roads and road building, in trade relations, domestic and foreign, armament or disarmament, army and navy, wages in general, strikes, railroads, taxation, suffrage, child labor, public health, national prohibition, the income tax, and a dozen other national or state questions, to say nothing of peace with Germany or the league of nations. Being so deeply interested in all these momentous political questions, is it any wonder that we may have overlooked such comparatively personal matters as medical legislation? And especially when so many physicians kept saying "let them have a separate board if they want it; they don't interfere with my practice at all"; then other very good physicians saying: "the more you fight them, the more you advertise them; just let them alone". These doctors did not realize that no personal fight was being urged against the men or women who were engaged in the practice of chiropractic; that our only fight was against their cult or system of practice.

All these and many other momentous questions are still before the American people, and are still to be solved. Every thinking man and woman in the United States is interested, vitally interested, in the solution of these great problems -- political problems, yes, but many of them are human problems. No physician, worthy of the name, can ignore such great, such far reaching, social, political and economic problems. Each and every one of us must put his shoulder to the wheel and push, so to speak.

William Allen White says: "To increase a man's self-respect is the thing needed to make him an American. An American is a self-respecting citizen, who can look every other human creature straight in the eye and tell him where to head in. Good clothes, a decent home, wholesome food, a bit of leisure for the newspaper, the park, the movies, and the lodge are necessary for Americanism; these and one

thing more—a steady job. Given these things he sits on the moon: take any of them away from him, and he loses his Americanism and develops a servile mind and heart. The present scale of wages will let him hold his good clothes, his home, his food and his leisure; but what about his steady job? That steady job is puzzling the world. It is the theme of bitter discussions in shops, colleges, banks, and everywhere." You and I and every other physician in our State -- our Nation -- is deeply interested in these social and economic problems. We cannot, we must not ignore them. They will all be settled in time: but it will take time. We doctors must all help. I have absolute faith in the good sense and wisdom of the American people. I have also an abiding faith in the sober, serious judgment of the American doctor in general, and the Oklahoma doctor in particular. That is why I believe that after all these vexing problems are settled and our Nation and our State is back to normalcy, our Oklahoma doctors will be ready and willing to devote enough time to organized medicine to place us on a par with our sister states, or above them. God speed the time.

## SERVICE AND EFFICIENCY\*

DR. L. M. WESTFALL

OKLAHOMA CITY, OKLAHOMA

Chairman's Address, Section on Eye, Ear, Nose and Throat, Twenty-Ninth Annual Meeting, McAlester May 17-19, 1921.

The outstanding thought of the present day business and professional life is aptly expressed in two words, Service and Efficiency. While not coined by the profession the idea certainly belongs to the medical profession from time immemorial. While comparatively new in the commercial world this thought has served as a solid foundation upon which the whole structure of our profession has rested for years. Efficiency like other worthwhile things comes not as the result of wishes but of well directed labor, and naturally the greater efficiency, the greater ability to render service.

The man who distinctly understands his own aims in life is to be congratulated, since without this proper understanding we are, as some one has said, likely to attempt the building of a tower and spend no more time and effort on the foundation than would be necessary to erect a hut.

Educators at the present time are attempting

\*Read in Section on Eye, Ear, Nose and Throat Twenty-Ninth Annual Meeting, McAlester, May 17-19, 1921.



to formulate some plan of education whereby a student of medicine, desiring to specialize in a certain branch, may do so with some saving of time, without sacrificing essential ground work.

It seems reasonable to suppose that a future ophthalmologist might with profit spend more hours on his chosen branch, rather than to delve so deeply into the intricacies of all other branches. Just how far, if at all, this may be carried without jeopardizing the altogether essential broad understanding of the subject is as yet an unanswered question. A narrow gauge specialist is not only inadequate, but is a liability rather than an asset to his community. The public of today is more vitally concerned than ever before in the conduct of its affairs, and this is especially true as concerns its health. This being the case the future policy of medicine is more or less in the hands of the public. The patient of today is often fairly well versed in medical ways and is not only willing but anxious to cooperate in arriving at proper conclusions; hence out of the time honored practice of consultation has come the more recent method of group practice, which properly handled may be productive of much greater efficiency. Naturally this system has disadvantages as well as advantages, among which is the difficulty in arriving at a proper balance between the remuneration due those directly concerned, without working a hardship upon the patient.

It would seem that an actual association representing the different specialties might be desirable in one community while in another it would be not only unnecessary but a handicap to physicians and patient alike. After all we are obligated to be more mindful of the patient's interest than our own.

The role of specialist is fortunately not so easily assumed as it once was, since fellow physicians require more and also the public is rather more inquisitive.

From a practical standpoint it seems safe to say that the specialty embracing eye, ear, nose and throat work is on a sounder and safer basis than ever before. There is a laudable tendency to broaden views and greater cooperation and an understanding that service does not mean self altogether. All of this makes for service and efficiency.

**Capsules Folia-Digitalis-Upsher Smith and Tincture of Digitalis-Upsher Smith.** The Council on Pharmacy and Chemistry reports that these preparations, advertised and sold by Upsher Smith, St. Paul, Minn., were considered and found to have the status of official articles. For this reason they were not admitted for inclusion in New and Nonofficial Remedies (Jour. A. M. A., Oct. 30, 1920, p. 1205).

## DIAGNOSIS AND TREATMENT OF ESSENTIAL VASCULAR HYPERTENSION.\*

RAY M. BALLYEAT, A. M., M. D.  
OKLAHOMA CITY, OKLAHOMA

I wish to thank you for the honor conferred upon me at our last annual meeting by selecting me your chairman. It has been a pleasure to perform this duty. I feel especially grateful to those who have so willingly met my request for papers and discussions. I shall deviate somewhat from the customary formal address by discussing briefly, the diagnosis and treatment of "essential vascular hypertension", a type of high blood pressure the majority of practitioners and hospitals have failed to recognize but have continued to call all cases of high blood pressure with albumen and casts in the urine, chronic Bright's disease or interstitial nephritis, and those whose urine is innocent of any deviation from the normal, arteriosclerosis.

The routine use of the sphygmomanometer and the extensive use of the laboratory during the past decade have changed our ideas concerning the relation that exists between high blood pressure and nephritis. In 1915, Sir Clifford Allbutt pointed out the fact that there is a type of hypertensive cases that do not fit into the class of chronic Bright's disease, as they fail to show the urinary findings considered essential. Neither do they fall into the class of arteriosclerosis, as practically no palpable or visible sclerotic changes of the arteries can be detected in the early cases. Its position as a distinct disease entity we owe to him. He designated the symptom complex by "Hyperpiesia". By this he defined a condition or disease whose essential feature and earliest manifestation is elevated blood pressure. This same type of high blood pressure has been studied by Theodore Janeway, Alfred Stengel, James O'Hare, D. Riseman, and others in this country. This disease has been referred to as "chronic hypertensive cardio-vascular disease", "primary hypertension", "vascular hypertension", and "essential vascular hypertension". It seems to me that the latter term is more descriptive of the condition.

Many of these cases are discovered during life insurance examinations. In these there are no symptoms and signs. In many the symptoms and signs are vague and indefinite. Most of these patients are, at the time of the development of their symptoms, in late middle life—a decade older than true Bright's disease.

\*Chairman's Address, Section on General Medicine, Neurology, Pathology and Bacteriology, Twenty-Ninth Annual Meeting, McAlester, Oklahoma, May 18-19, 1921.

which occurs in early middle life, and a decade younger than senile arteriosclerosis, senile myocarditis, or cardio-sclerosis and arterio-sclerotic kidney.

Notes on a single patient that I have observed will illustrate a number of features of essential vascular hypertension.

Mr. J. J. F., lawyer, aged fifty-eight, first studied at St. Anthony's Hospital one year ago. He gave a history of high blood pressure of five years duration at the beginning of which time a slight trace of albumen was found in his urine. He was told at that time that he had chronic Bright's disease and that his life was a matter of only a few months. At the time of my first examination of him, his chief symptom was an early morning headache which disappeared after he was up and about his work. He gave a family history of apoplexy. His past history was entirely negative. He was a large man, of an English squire type, florid complexion, plethoric habits, and active temperament. Physical examination showed a heart that was slightly enlarged. There was a slight thickening of the radial vessels. Ophthalmoscopic examination showed slight displacement of the veins at the arterial crossings. Blood pressure was 200 systolic, 104 diastolic. The urine had a gravity of 1024. There was a slight trace of albumin and a few hyaline casts. His blood pressure and urinary findings were about the same as they were five years ago. His P. S. P. was within normal limits. It had not been done at the time his blood pressure was first taken. Had the original diagnosis been correct we should have expected our patient to have shown toxic renal symptoms and function to be much reduced. The original diagnosis and prognosis were incorrect. This patient comes under the class of essential vascular hypertension.

It is important to differentiate this type of high blood pressure from the one that is secondary to nephritis. In the nephritic type the kidney is small and the glomeruli, tubules and renal vessels are involved. In the vascular type the kidney is normal in size and the lesion is confined largely to the blood vessel.

Clinically, the vascular and nephritic types are different. Essential vascular hypertension is typified by the business man in late middle life whose family history is frequently that of Bright's disease, heart trouble, or apoplexy. It occurs especially in people of robust health. They are frequently overweight or obese. Physically, they pursue their work with seriousness and worry over little matters. They are usually interested in very little outside their own business; are too busy to take vacations and are unable to relax. As a rule they are poor sleepers. They are endowed with hearty appetites and indulge in them freely. They

frequently stimulate their mental faculties by a moderate use of alcohol. They often come for examination, complaining of a morning headache, irritability, nervousness, extreme worry, lack of concentration, loss of memory and co-ordination, fear, sleeplessness, dizziness or ringing in the ears. If the patient is a woman she is a similar type usually in, near, or just following the menopause. On examination the blood pressure will be found to range between 150-300. Urine examination may or may not show a trace of albumen and casts. Their ability to concentrate is good. The phathalein output is within normal limits. The nephritic type of high blood pressure is usually a younger individual, pale and sallow, who is suffering from headaches, drowsiness, nausea, and vomiting. The urine examination will show albumen and casts. Their ability to concentrate is poor and the phthalein output is low.

Besides the high blood pressure, physical examination frequently reveals but little that is abnormal. Most of the cases show slight thickening of the radial vessels. The long standing cases usually show marked thickening and tortuosity of the radial vessels. These cases show enlargement of the heart, especially to the left. Ophthalmoscopic examination reveals in many cases tortuosity of the terminal retinal arteries and evidence of pressure of the artery on the vein at the arteriovenous crossings. The blood pressure in these cases usually ranges from 160-300. Usually a patient with a systolic pressure of over 250 is of the essential vascular hypertension type, and there is but little evidence of nephritis. In the cases of long standing there may be evidence of myocardial degeneration as is indicated by an enlarged heart with tick-tock sounds. There is frequent evidence of passive congestion of the liver; however, at this stage the blood pressure begins to fall. The pulse is elevated and the patient complains of shortness of breath. These patients should all have renal function tests, and if the kidney changes are not great it seems logical to believe that the renal changes are secondary to the blood pressure.

The prognosis in the vascular type varies greatly from the nephritic type. This type rarely, if ever, dies of uremia. Their death is that of a cerebral accident or cardiac failure. A case of true nephritis with high blood pressure seldom dies suddenly, but gradually becomes toxic from the retained nitrogenous products. There is no such thing as acute uremia, so when a patient with albumen and casts in the urine suddenly becomes unconscious, one may be fairly safe in believing that the kidney involvement is not great. If the unconsciousness is only of a few hours duration, the condition is often that of a cerebral arteriospasm.

Essential vascular hypertension, though serious does not justify the routine prognosis often given. With good renal functions and no cardiac symptoms many of these patients will live a long and fairly active life. It is important to evaluate both the renal and cardiac involvement. Ophthalmoscopic examination of the eye grounds is of value in telling us the condition of a group of small vessels in intimate association with important cerebral vessels. Prognosis depends on the condition of the cerebral vessels, the myocardium and coronary arteries, and on renal function rather than on height of the blood pressure.

The treatment of these cases is chiefly that of teaching them how to live. It seems advisable to emphasize to the patient the good prognostic view with enough of the serious possibilities to impress the importance of readjusting his life. It is well to let some member of the family know of the uncertainties of such patients as vascular accidents are so common. It should be remembered that when many patients are relieved of their worries and strenuous work or their habits of eating have been changed, or in case of a woman her menopause is completed, there may be marked improvement.

In essential vascular hypertension, the foundation of all treatment lies in the readjustment of the patient's habits of eating, drinking, worrying, and playing. One should know a great deal about a patient's daily life, including often confidential information as to domestic or business cares. It is a condition in which the common sensed family physician is of far greater value than the consultant. The part the consultant can play is that of obtaining information as to renal function, cardiac efficiency, and arterial changes, etc., often not accessible to the family physician. The consultant may see the patient from time to time for further functional tests.

Diet plays an important part in the treatment of this condition. Many of these patients over eat and over drink. The best results have been obtained with lacto-vegetarian, salt limited diet. There has been some tendency to decrease greatly the proteins; however, recent investigators believe that patients do better with the proteins only moderately decreased. I usually tell them to eat small quantities of eggs, meat, fish, cheese, ripe beans, and ripe peas. Do not add extra salt. Use tea and coffee sparingly. Limit the use of tobacco. Drink a moderate amount of water. This is sufficient to give them a fair idea about their diet. It is often well to advise rest both mentally and physically. A good way to get a tired, worn business man to rest is to have him come into the hospital for a few days for a functional

study of his heart and kidneys. To advise a patient of the essential vascular type of high blood pressure to rest in bed for a long duration is by no means always the wise thing to do. To divorce a man entirely from his business is usually a mistake unless the blood pressure is very high or there is evidence of a fast failing heart. Symptoms as fatigue, precordial pain and headache are evidence of too much exercise. Exercise should be in the form of walking, golfing, etc. Weekly catharsis is considered good treatment. Business men should be advised to take frequent vacations as that often removes the factors which are keeping up the high blood pressure. They should be taught, if possible, how to relax. Drugs play a little part in this form of high blood pressure. In cases in which the blood pressure is extremely high, the nitrites may be used for temporary lowering of the blood pressure--Nitroglycerine is very effective for temporary relief in angina. Potassium iodid in small doses seems to make the patient feel better. Its action is entirely empirical. Some women in the menopause seem to be relieved of their symptoms by the use of ovarian extract. Bleeding is a measure that is useful when there is evidence of danger of cerebral hemorrhage or right sided cardiac embarrassment. Any high blood pressure patient showing evidence of a failing heart should have appropriate treatment which means digitalis and rest. This does not mean small doses of digitalis, but sufficient quantities to digitalize. When there is evidence of a failing heart there is no contraindication to the use of digitalis. It is the drug par excellence for a failing cardiac muscle.

## SUMMARY

1. Essential vascular hypertension is a distant disease entity.
2. In early cases kidney function is normal.
3. This form of high blood pressure is typified by the business man in early middle life.
4. This condition can be definitely determined by tests of renal function.
5. Ophthalmoscopic examination is essential in determining the conditions of the cerebral vessels.
6. Essential vascular hypertensive cases seldom, if ever, die of uremia but of cerebral accident or cardiac failure.
7. The treatment of these cases is chiefly that of teaching them to live within their limits.
8. Many early cases of Essential Vascular Hypertension can be cured, so it is very important that the general practitioner be familiar with this condition.
9. Digitalis is the most important drug in the treatment of those who show symptoms of a failing cardiac muscle. 611 First Natl. Bank.



## IMPORTANCE OF THE TREATMENT OF INJURIES AND OTHER MINOR SURGICAL CONDITIONS.\*

P. P. NESBITT, M. D.  
MUSKOGEE, OKLAHOMA

Very briefly I want to call the attention of the whole profession to a few classes of our work which to my mind are not receiving the attention their importance entitles them to. The members of the medical profession, almost without exception, are doing minor surgery, especially in the treatment of accidental injuries. Even the specialist in non-surgical lines is compelled by circumstances to treat some of these cases, while to the man in general practice and the surgical specialist they form a very considerable part of their work.

It is easy to interest the surgical specialist in anything that promises better diagnosis, operative technique, or final results in major operative surgery. Our journals are filled with writings and volumes are being constantly added to the literature of these subjects. But even of these men how many keep themselves informed, and use the approved up-to-date methods in the treatment of injuries? What proportion of the doctors of this state are prepared to care for an emergency case, such as is liable to come to them at any time, quickly and in a way to give the patient the greatest chance for a clean wound?

In every community a considerable number of the women who have borne children suffer from the effects of unrepaired lacerations. Notwithstanding the fact that immediate repair of lacerations of the perineum is comparatively easy and that good results are almost always obtained, a great many doctors doing obstetrical work let them go uncared for.

The experiences of the army surgeons, the industrial insurance departments, and the surgical services of the large industrial companies have shown that by proper treatment of injuries and minor surgical conditions loss of time from work is materially lessened, and recovery with minimum disability assured. Every day we see people working who are handicapped by the result of former injuries which our orthopedic friends assure us could have been avoided by proper treatment. This is often because the patient discontinues treatment before being discharged by the doctor. But do we always impress upon him the importance of this after treatment?

Army experiences prove the value of the

debridement of lacerated wounds but a very large proportion of such are allowed to run on with sloughing of the devitalized tissue and formation of a large amount of scar tissue that is often a cause of disability, not to mention the loss of time to the patient and the greater amount of physical suffering he must endure.

Every year sees an increase in the number of doctors who have all fractures, dislocations, and sprains X-Rayed, but a great many have apparently not yet learned the importance of this procedure.

In the treatment of burns do we all use the methods that have been proved to lessen suffering, the time of healing, and the formation of a cicatricial tissue? And how many use appropriate splints to prevent the disfiguring and disabling contractions following burns of the extremities?

In my opinion the number of cases in civil practice in which the Carrell-Dakin treatment is indicated is very limited. But they do occur and its use may save a limb or even the life of the patient. Yet how many doctors understand the technique, and how many of our hospitals are prepared to furnish this treatment?

While it is true that even the newer methods are far from perfect, it is also true that improvements are being made. It is not advisable, even if it were possible, for most of us to try the different fads and fancies that are being continually brought to our attention by our journals and the newspapers. But after a method has been thoroughly tried by those in position to do so, and it is found to be an advance over the methods used before, we owe it to ourselves and to our patients to familiarize ourselves with the indications for, and the technique of the administration of the newer method. If this plan was generally followed it would greatly benefit the standing of the profession as a whole and increase the usefulness of each member to the community he serves.

**Chaulmoogra Oil.** Chaulmoogra Oil is obtained by expression from the seeds of an East Indian tree, *Faraktonos kurzii*. Closely related oils are obtained from *Hydnocarpus wightiana* Blume, and *H. anthelmintica* Pierre. This class differs from other known oils in being composed chiefly of the glycerol esters of two unsaturated fatty acids, named chaulmoogric acid and hydnocarpic acid. In India, chaulmoogra oil has been used both orally and externally in the treatment of leprosy since prehistoric times. Tourroules used the oil subcutaneously in 1899. V. D. Heiser used the oil in 1914 for the treatment of leprosy by intramuscular injection. Leonard Rogers used orally a mixture of the fatty acids from the oil, which he called gynocardic acid, and later used the sodium salts of these acids subcutaneously (1916) and later on intravenously. Hollman and Dean employed the ethyl esters of the fatty acids from the oil in 1919 (*Jour. A. M. A.*, Nov. 13, 1920, p. 1361).

\*The Chairman's Address, Section on Surgery and Gynecology, Twenty-Ninth Annual Meeting, Oklahoma State Medical Association, McAlester, May 18, 1921.

## CARE OF THE NEWBORN\*

W. M. TAYLOR, B. S., M. D.

OKLAHOMA CITY, OKLAHOMA

Associate Professor of Pediatrics, Oklahoma University  
School of Medicine.

As chairman of this very interesting Section I can think of no subject with so many points in common to all here as that of the Newborn. This subject should be of special interest to the obstetrician as well as pediatric, for, from personal inquiry, I have found the care during this period of infant life almost entirely in the hands of the obstetrician whether or not he be especially interested in pediatrics.

We have heard papers and addresses on the care of the infant, the child of pre-school age and the school child but till very recently little stress had been given the special care and observation due the Newborn. I mean by the "Newborn" period, that of the first two to four weeks of life.

To quote Ballantyne †:

"It is not difficult to see why all newborn maladies are so hard to classify and to understand, why their etiology is so obscure and why their mortality is so high and their morbidity so great.

They are ordinary, not extraordinary, diseases but they occur in an organism which is extraordinary in the sense that it is a transition one and so they come to have peculiar characters and a special mortality.

The newborn infant is the meeting place of antenatal morbid tendencies and postnatal pathological causes and lesions, and these diverse influences all fall upon a body which has just passed through the unique experience of birth."

I need not emphasize the importance of carefully kept charts or records of the Newborn from birth for the importance of this procedure is self-evident and only by our attention to these details are we able to direct our endeavors along the correct lines necessary for the management and welfare of the Newborn. To obtain this, more careful training of nurses is necessary. In every well organized obstetrical hospital there should be a short course given the nurses on the care of the full term Newborn and the premature or the congenitally weak baby, the management of which is practically the same. It is on the nurse that we must depend for much of our earliest evidence of any departure from normal; first of course, teaching them the normal. To obtain results advice should be obtained early and it depends

on careful observation and correct interpretation of signs and symptoms which must be accessible for the drawing of correct conclusions.

No attempt is made to offer anything new too much of interest and value has been called to our attention in the last decade by a more intensive study of ailments peculiar to the Newborn and by closer observation and careful interpretation of symptoms suggesting any departure from normal.

I shall endeavor to briefly point out the significance of some of these manifestations as seen in the Newborn. 1. The temperature or maintenance of body heat. 2. The stools. 3. Convulsive seizures-general or muscular twitchings. 4. Cyanosis-sinking spells with disturbed respiratory action. 5. Hemorrhages-blood in stools, from other mucous membranes or subcutaneous. 6. Icterus and its etiology. 7. Preventive Pediatrics.

The maintenance of body heat is important. If the temperature is subnormal-why? Is it too prolonged exposure on bathing or is it an evidence of prenativity or congenital weakness? We see often even in a well equipped and well managed obstetrical institution the Newborn with lips, arms and legs blue from unnecessary exposure which, of necessity, lowers vital force at the very time when its conservation is most needed. This is often the deciding factor for or against the premature or delicate baby, so we must reckon with it as certainly a serious handicap to even the normal Newborn. A sub-normal temperature is of as much significance as an elevation in temperature yet how few of our nurses are instructed to that effect.

The stools are worthy of study during this period as to character, number or presence of blood. If not sufficient in number or quantity the chance for acute intestinal intoxication with its extremely high temperature is much increased, for the meconium content of the bowel furnishes an excellent culture media for bacterial growth. This may often be forestalled by timely aid in proper elimination.

Any evidence of spasmodic seizures whether local or general should never be passed over without careful investigation. More significantly is this associated with recurring attacks of cyanosis. Foote, 2, states that respiratory distress and blueness in the Newborn should always suggest cranial hemorrhage with or without muscular rigidity and twitching and that we are not only justified in doing a lumbar puncture for its diagnostic value but it is indicated for its therapeutic value.

Cyanosis in the Newborn is never without significance. It cannot be regarded as an entity for it appears so often in association with various pathological processes in the Newborn. Developmental defects of the heart or

\*Chairman's Address: Section on Pediatrics, and Obstetrics, 29th Annual Meeting, McAlester, Oklahoma, May, 1921.

faulty development of the lungs as, atelectasis in the premature or congenitally weak are to be thought of in the absence of other assignable causes. Again the carefully kept chart is of assistance in arriving at a differential diagnosis—noting whether the symptoms are permanent, transient, date from birth or some definite later period.

The first evidence of hemorrhagic diseases of the Newborn is often found here also as evidenced by the tarry stools containing free blood. It is not my intention to go into the cause and symptoms of cerebral hemorrhage but would say in passing that when careful observers, from their post mortem findings state that something like 50 per cent. of all deaths at birth are due to this cause, it is due our careful consideration.

Rodda<sup>3</sup> enumerates the causes of cerebral hemorrhage and adds that from his observations many cases are due not to birth trauma but to the so-called hemorrhagic disease manifesting itself in the brain. He suggests that disturbed coagulation as a factor and if coagulation is delayed, the administration of whole blood, which we know is a safe and simple procedure.

Physiologic jaundice or icterus neonatorum appears in from 30 to 40 per cent. of normal babies but it is not safe for our reputation nor the welfare of the baby to forget that congenital syphilis, sepsis or congenital obliteration of the bile ducts may be a possible cause. In every case it is worth while to examine the cord.

To him with a clear conception of preventive medicine it must appear indeed clear that the Newborn period marks its very beginning. In many instances when later weaning for various causes is unavoidable, the Newborn may be, to his material advantage, kept partially on breast nursing till with supplementary feeding, he can, with comparative safety, be put on sui able modified milk formula. Even in tubercular mothers, unless gravely ill, the Newborn may be partially nursed to his advantage with no danger to self and no harmful effect to the mother, till with supplementary feeding he becomes adjusted to his artificial food. The baby is entitled to this and we should demand it when we consider the high mortality when immediate weaning is allowed, no matter how expert one may be in scientific infant feeding. Proper feeding of the Newborn is important and far reaching in its effects.

We must consider the chain of intestinal disorders which so often follow a poor start dating from the Newborn period even if he does survive and reach infancy or childhood.

In the hands of the obstetrician and pediatricist rests the very earliest and most important

stage of preventive medicine. We need such care as the well informed and expert obstetrician in his antenatal work together with post-natal care which should begin when the Newborn is ushered in.

Nores. (1). Ballantyne, J. W.—“The Nature and Management of Neonatal Diseases.”—Archives of Pediatrics, March, 1921.

(2). Foote.—“The Hemorrhagic Tendency as a Frequent Cause of Cranial Hemorrhage of the Newborn.” Amer. Journal Diseases of Children, July, 1920.

(3). Rodda.—“Studies with a New Method for Determining the Coagulation Time of the Blood in the Newborn.” Amer. Jour. Dis. of Children, April, 1920.

## PRESIDENT'S ADDRESS\*

### OKLAHOMA STATE HOSPITAL ASSOCIATION

MCALISTER, OKLAHOMA

MAY 18, 1921

FRED S. CLINTON, M. D., F. A. C. S.

TULSA, OKLAHOMA

The officers of the Oklahoma State Hospital Association appreciate your presence at this open meeting. By this token you evince an interest in the affairs which most vitally concern the greatest asset of a nation—its health.

The World War, with its wide reach, diffused human knowledge to such an extent that every community has a right to expect the establishment of some hospital facilities. The multiplicity of these institutions calls for some supervision.

The primary purpose of this organization is to encourage the dissemination of the best and most economic methods employed in the organization, construction, equipment and maintenance of hospitals with a view of rendering the most efficient medical and nursing service to the patient. In other words, this organization is an instrumentality of service.

The presence of these distinguished men from Texas, Missouri and our own beloved state is a token not only of their zeal to aid in the diffusion of information, but a proof of the importance of the subject as well as a compliment to the cause.

If there must be any statement as to the justification of the existence of this organization, it may be easily found in the following four points.

First. To aid in the diffusion of the knowledge gained in the recent hospital survey of this country under the supervision of the American College of Surgeons and encourage the establishment of the minimum standard

\* Read at 29th Annual Meeting, McAlister, May 18, 1921



of mental, moral and material equipment of hospitals for caring for the ill and injured.

Second. To arouse an interest among the people as well as the profession in the importance of conserving the health, the greatest asset of a nation, in a business way.

Third. To present an organized effort to attain these worthy ideals and to combine all of the activities and agencies under the leadership of those who are experienced and trained in this particular field of endeavor.

Fourth. To direct your attention to the shortage of nurses throughout the country and to seek your aid in correcting this condition. By opening the doors of opportunity to women in all the fields of endeavor and by broadening the scope of their work not only in industry but in medicine it is necessary to provide an increasing supply in this field of activity.

The large number of hospitals being organized will invite in the near future certain legislation which should be secured by the co-operation of those trained and engaged in this service to humanity.

We know the program this evening will prove not only interesting but instructive and bespeak your careful attention.

#### THE DOCTOR.

The alleged rapacity of doctors is one of the meanest of libels. It is contradicted by common knowledge and every day experience. The physician who thinks first of his fee is a rarity.

The young woman of Trenton who was ready to sell herself in marriage for \$1,000 to pay for an operation on her mother need only to have gone to the nearest hospital and not a cent would have been asked. A Brooklyn doctor two days ago got up from a sickbed to take a bullet from the brain of an insane prisoner. His fee was - nothing.

From the time of Galen the medical profession has been the butt of jesters. Most of the jokes are variants of "The surgeon buries his mistakes". Addison, in *The Spectator*, thought it good humor to write: "We may lay it down as a maxim that when a nation abounds in physicians it grows thin of people \* \* \* This body of men in our own country may be described like the British army in Caesar's time. Some of them slay in chariots and some on foot. If the infantry does less execution than the charioteers it is because they can not be carried so soon into all quarters of the town and dispatch so much business in so short a time."

Yet there were doubtless fifty doctors in London who would have given their days and nights to Addison though he hadn't a guinea to pay.

It is only in modern letters that we find real appreciation of one of the noblest of professions - in the poems for example, of William Ernest Henley, who knew what it meant to be In Hospital. It is good to feel that these lines from his sonnet "The Chief" truly express a sentiment that is general today:

*It envy scout, if ignorance deny  
His faultless patience, his unyielding will,  
Beautiful gentleness and splendid skill,  
Innumerable gratuities reply.*

Doctors are no doubt lower than the angels, but in whose daily labor is there more of unselfish service to fellow human beings?

Guthrie Leader.

#### APPL CANTS FOR RECIPROCITY

Reciprocity Rules of great importance to those concerned have been promulgated by the State Board of Medical Examiners, as set forth in the following communication from Secretary Byrum:

Dr. C. A. Thompson, Secretary, Dear Doctor: At a recent meeting of the Oklahoma Board of Medical Examiners, a resolution was adopted providing that an applicant for reciprocity from one state with whom we reciprocate having grades and endorsement from another state with whom we reciprocate, would be considered eligible, if otherwise qualified, provided he had the indorsement of the Boards of both States.

Heretofore we have adhered to the rule that an applicant must be living in the State from which he asks reciprocity. It is the opinion that this new ruling will carry out the true spirit of reciprocity among the reciprocating States and at the same time work to the advantage of the applicant. The Oklahoma Board, however, considers reciprocity very much an individual matter with each applicant, in about the same manner as is required by an applicant taking the examinations.

With personal regards, I beg to remain, Yours truly,  
J. M. Byrum, Sec'y.

#### MOORHEAD'S TRAUMATIC SURGERY

The first edition of Moorhead's Traumatic Surgery filled exactly a real need in giving the student and worker in industrial surgery a practical condensation of good methods to be followed from the moment of first aid to the end of the case. The second edition does all this, but with added weight by change of cuts, rewriting in entirety some chapters and sections. While all the good lessons culled from the mass of knowledge acquired from the experiences of war surgery and its complexities; "the author is not of the opinion that the management of the injured has been radically changed by war experiences", which statement voices the rather fixed opinion of many workers dealing with the very practical problems of emergency surgery that we are not warranted in discarding the old reliable measures heretofore serving us well, for the uncertainties born of too ready enthusiasms and too ready acceptance of innovations not yet established, if they ever will be, in the mind of the surgeon capable of separating the chaff from the grain.

This work has that element fully set out, without which neither surgeon or patient can be satisfied, that the best course has been followed - and that is attention to details at the initiation of the case in such a manner as paves the way for the shortest convalescence, a satisfied attendant and grateful patient. In no department of the surgeon's work is scrupulous attention to minutiae rewarded with such end results as is that involved in the myriad class of industrial accidents. Neglect of the simplest bit of infection or devitalized tissue at first may be followed by loss of function and tedious recovery far out of proportion to the small bit of time given by necessary treatment. The class of injured concerned so often contribute by their own acts of commission or omission to a prolonged crippling of what would have been simplicity itself by properly applied first aid, that every case placed by the surgeon on the right side of the ledger of experience increases productive power of man, lessens compensation for the employer and makes for more general satisfaction in the difficult relations existing between employer and employee. From the purely scientific and clinical aspects the work enters every realm involved with the various tasks incident to industrial surgery. It is a valuable aid to the surgeon charged with the care of the thousands of employees constantly menaced from and receiving injuries peculiar to their employment.

# THE JOURNAL

OF THE

## Oklahoma State Medical Association

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Articles sent this Journal for publication and all those read at the annual meetings of the State Association are the sole property of this Journal. The Journal relies on each individual contributor's strict adherence to this well-known rule of medical journalism. In the event an article sent this Journal for publication is published before appearance in the Journal, the manuscript will be returned to the writer.

Failure to receive the Journal should call for immediate notification of the editor, 508 Barnes Building, Muskogee, Okla.

Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

Advertising rates will be supplied on application. It is suggested that wherever possible members of the State Association should patronize our advertisers in preference to others as a matter of fair reciprocity.

### EDITORIAL

TRANSACTIONS OF THE HOUSE OF  
DELEGATES AND COUNCIL, WITH  
REPORT OF CERTAIN COM-  
MITTEES AND OFFICERS,  
29th ANNUAL MEETING,  
McALESTER,  
May 17-19, 1921.

House Of Delegates, 2:00 P. M.,  
May 17.

Call to order by the President, Dr. G. A. Boyle, Enid

Motions prevailed to appoint committee on credentials and to audit the books of the Secretary-Treasurer-Editor, which had been submitted by the Councils auditing committee. The Committees;

Credentials. Drs. W. C. Bradford, Chairman, Shawnee; L. J. Moorman, Oklahoma City and Chas. R. Hume, Anadarko.

Auditing; Drs. L. A. Mitchell, Chairman, Frederick; J. L. Austin, Durant, A. S. Risser, Blackwell. At this juncture the President announced that by reason of his election to the

Presidency the vacancy resulting in his office as Councillor for the 1st. District had been filled by appointment of Dr. A. S. Risser, Blackwell.

Motion prevailed to omit reading minutes of the previous meeting as they had been printed in the Journal of June 1920, except such sections as appertained to the business of the House.

Reports of standing committees were called (For full report of those made see "Reports of Committees", this issue of Journal).

**Legislative Committee:** Dr. J. M. Byrum, member of the committee, advised that no report had been made on the assumption that it would be rendered by Dr. Hugh Scott, Chairman. He stated, however, that "I can say in a general way what we all know, that the doctors have not accomplished anything in a legislative way", that the Committee with the President and Secretary had held a meeting early in the session of the Legislature, mapped out a tentative course of procedure, which the profession of the State would be asked to co-operate with wherever possible, that legislation of a general character would not be sought, that proposals pending from osteopaths and chiropractors seeking creation of separate boards would be opposed, that Dr. Scott should have general charge of the work, and was authorized to employ such agents to aid as the funds believed forthcoming would justify, that members of the committee also personally visited legislative members in an attempt to prevent the enactments in question, that the efforts amounted to nothing, the bills becoming law, that then a draft for the creation of a board of examiners conforming to the new situation was made which passed the Senate, but the sudden adjournment of the House left the proposal unenacted (This action nullifies the supposed law noted on page 117, May Journal, passage of which was prematurely announced).

The Secretary here called attention to the significant action of the Michigan Senate which rejected a chiropractic proposal substantially identical by a vote of 67 to 1, adding that he had been informed that faculty members of the great California Universities and the professions of that state and Oregon had not been found so "high-brow" that they could not successfully descend into the mire of "politics" and overwhelmingly defeat the issues we so overwhelmingly endorsed in November.

The President here announced appointment of a Council committee to consider and report upon the appeal of Dr. R. F. Fuller vs the Washington County Society and Dr. R. L. Kurtz vs Nowata County Society. Drs. C. W. Heitzman, Muskogee, Chairman, M. E. Stout,

Oklahoma City and L. C. Kuyrkendall, McAlester.

**Committee on Cancer.** Dr. McLain Rogers, Clinton, member of the Committee on Cancer, announced that they had no report to make, but Dr. E. S. Lain, Oklahoma City, member, also State Director representing the American Society for the prevention and cure of cancer made the following statement:

"You are all aware no doubt of existence of The American Society for the Prevention and Cure of Cancer. Since the close of the war this association has extended its work until now practically every state in the Union has a State or District Supervisor. Oklahoma, Arkansas and Kansas were placed in the 5th District and I was appointed Chairman for this State. I have already large quantities of literature issued by the society in the work of getting the matter and the subject before nurses, clubs, physicians etc. The intention is to follow generally the plan in operation by the Tuberculosis Society. The literature is authentic and from sources of authority as well as up to date. I shall be glad to furnish these publications upon request".

The president took occasion to personally thank Dr. Lain for his remarks.

**Committee on Pellagra:** Dr. L. A. Mitchell, Frederick, Chairman, stated that no report was prepared, explaining that he thought the committee had been dissolved, that last year written requests to other members to aid in the preparation of a report had produced no results and by reason of one member being absent in the army supposed that the matter was abandoned. Dr. L. J. Moorman, ex-president, Oklahoma City, explained that the misunderstanding that the committee was dissolved arose from his suggestion to the House of Delegates that responsibility for committee reports be placed upon one member who would prepare such conclusions as might be offered by his fellow members. Dr. J. C. Watkins, Checotah, member of the committee, stated that he, too, was under impression the committee did not exist. Dr. L. J. Moorman, Oklahoma City, then moved that hereafter a committee of one be appointed to report such subjects as were covered by committees charged with report of scientific matters. Motion adopted.

**Committee on Venereal Diseases.** No report.

**Committee on Tuberculosis:** Dr. Horace T. Price, member, Tulsa stated: "This year my only knowledge of that committee has been from the Journal, a letter a month ago to the Chairman is unanswered. Dr. C. W. Heitzman, Muskogee, member of the committee stated:

"There is but one thing that has come to my attention as a member of the committee—a communication from the General Secretary of the Oklahoma Public Health Association relative to the establishment of a one day a month clinic for the detection of doubtful or early cases of tuberculosis. These clinics were to be held in various parts of the State. I opposed this for the reason that such a procedure would defeat the very purpose for which it was created. Further, I suggest that such money as is available could be used with advantage in the examination of children where early cases of tuberculosis might be uncovered. Just here I would like to call your attention to these various organizations having for their purpose the diagnosis and treatment of diseases, and what they are slowly but surely leading to. They are simply the outposts of State medicine. While we are so busy in our endeavors to control the various cults that are seeking to cure the sick, the more important and vital things are escaping our attention. We are slowly but surely approaching a system of State control of the practice of medicine. Now is the time, if it is not already too late, to go on record as emphatically opposed to State medicine and to any scheme for Health Centers, Group Medicine, and Diagnostic Clinics, either wholly or partly controlled, operated and subsidized by the State or National Government. Think about it".

**Conservation of Vision:** Dr. W. Albert Cook, Chairman, Tulsa, stated: "The principal thing occurring of interest in this work is the passage recently of a law making neglect of administration of prophylactic silver solutions to the eyes of the new-born punishable by fine and imprisonment. If the law is enforced it will do a great deal of good." Dr. Cook also called attention to the menace of wood alcohol poisoning from the various alcoholic drinks offered for sale over the State, stating that the danger was real and every effort should be used to combat it by wide publicity. He also asked that the State Association and physicians take personal interest in the problem of modern school-room lighting, citing the system adopted in erection of Tulsa school-rooms, which were so arranged that every room would have all the outside light possible.

**Committee on Medical Education:** No report.

**Committee on Benefactions:** Dr. L. J. Moorman, Chairman, Oklahoma City.

"This committee has no report to make at this time. The purposes were explained at the last annual meeting and it is not necessary to go into that now. I wish to make a correction as to the personnel; Dr. McLain Rogers, Clin-



ton, should appear as a member which brings it up to five, at which number I think it should stand. We shall probably have a little expense for postage etc., which should be provided for. There is a great deal of money in Oklahoma and something should be done to bring our needs to the eyes of the people who have plenty. Nearly every month eastern hospitals and eastern laboratories have donations for research work. If we can succeed in this plan there is a possibility that we may do more toward accomplishing some good to humanity and put Oklahoma forward, as far as the medical association is concerned. There are lots of people in Oklahoma with money who would like to know they are benefitting mankind with it.

**Committee on Health Problems in Education:** Dr. A. S. Risser, Blackwell, member, stated that so far no meeting had been held, that he advised the Chairman of his readiness to serve if there was anything he could do. (Later a committee report in this matter was handed in. See Reports etc.)

**The Auditing Committee** reported that they had examined the books of the Secretary-Treasurer-Editor and found them correct as submitted. Motion prevailed to accept the report; Carried. (See report this issue).

**Proposed Amendments to the Constitution and By-Laws** were called for, vote resulting as follows:

Section 3, Article 9, Constitution was amended by adoption of the following changes which had been presented to the previous annual meeting.

Section 3, Article 9, page 3, line 3, Constitution edition of 1915 strike out the words "the last day of the Annual Session" and substitute the words "the second day of the Annual Session".

Chapter 2, By-Laws Annual and Special Sessions Etc., page 7, amend to read; "Section 3. The scientific sections shall begin their meetings on the first day of the Annual Session at such hour as may be deemed best by the President, Secretary-Treasurer-Editor and Chairman of the Sections. These officers in selecting the time of such meetings shall be governed by local conditions and expediency, taking into consideration all possible economy of time and comfort of the members attending".

**Chapter 4—House of Delegates:** Change Section 1, page 7 to read: "The House of Delegates shall meet on the first day of the Annual Session at such hour as may be determined by the President, President-Elect, Secretary-Treasurer-Editor. It may adjourn from time to time, meeting on call, as may be necessary to complete its business, provided, that its hours shall conflict as little as possible with the General Meeting and Scientific Sections.

The order of business shall be announced in the program issued prior to the meeting".

Messages of friendly greetings were received and read from Dr. Seale Harris, Secretary-Editor, Southern Medical Association and Dr. William R. Bathurst, Little Rock, Secretary-Editor, Arkansas State Medical Association, then in convention. Dr. Bathurst presented the greetings from that Association and advised that he had been instructed to cordially write and urge members of the Oklahoma State Medical Association to visit Hot Springs in November and attend the annual meeting of the Southern Medical Association "when the profession of Arkansas and of Hot Springs are host to your own and our own great Southern Medical Association".

The House discussed the practicability and propriety of increasing membership dues in the State Association of these members delinquent and lapsed by reason of non-renewal. It was pointed out that the small number in that class annually provoked more unnecessary expense and labor than all other members combined who placed themselves in good standing during January of each year.

The House then adjourned to meet on call of the President.

C. A. Thompson, M. D.,  
Secretary-Treasurer-Editor.

## HOUSE of DELEGATES; May 18, 9:00 P. M.

The President Dr. G. A. Boyle, presiding.

The house was called to order for the purpose of election of officers and completion of any business presented or pending. Notice of hour of election in compliance with the newly adopted amendments to the Constitution and By-Laws had been made by oral and written notice to each of the sections in session during the afternoon and in the meeting of the section on hospitals that evening.

The credentials committee completed its roll and reported 71 delegates seated.

The report of the Council was accepted and approved.

Dr. C. W. Heitzman announced that an effort would be made to raise funds by subscription for the purpose of erecting in Oklahoma City a permanent building as a home for the State Medical Association which should be known as a memorial to the late Dr. John W. Duke of Guthrie. After the discussion several members made subscriptions to that purpose and others promised to cooperate at a later date.

**The Election of Officers** resulted as follows: President-Elect Dr. Melvin Rogers, Clinton. 1st Vice-president, Dr. J. A. Walker, Shawnee. 2nd Vice-president, Dr. J. C. Best,

Ardmore, 3rd Vice-president, Dr. L. B. Torrance, Okmulgee. Delegate to the A. M. A. (1922-1923) Dr. J. M. Byrum, Shawnee. Councillor, 1st District, Dr. A. S. Risser, Blackwell, Councillor, 6th District Dr. L. S. Willour, McAlester. Meeting Place 1922, Oklahoma City.

Dr Horace Reed, Oklahoma City, moved that "We extend a vote of thanks to the Pittsburg County Medical Society, the Mayor of McAlester, the First Baptist Church—and apologize for the condition in which we are leaving the Church, and to the physicians and citizens of McAlester for the splendid reception given the members of the Medical Association during their stay in McAlester. Motion carried.

The President announced appointment of the following committee on medical defense. Drs. P. P. Nesbitt, J. Hutchings White, Muskogee; L. S. Willour, McAlester; the President and Secretary-Treasurer-Editor being members by virtue of their office.

He also announced that the committee for revision of the Constitution and By-laws would be named at a later date.

It being announced that all sections had completed their programs, and the business of the House having been concluded, the House then adjourned.

C. A. Thompson,  
Secretary-Treasurer-Editor.

#### MEETING OF THE COUNCIL:

11:00 A. M. Tuesday, May 17th; The Council met and informally discussed affairs of the Association, including revenues, medical defense, increase in membership etc.

Council, May 18th, 12:15 P. M.

The President presiding.

Dr. C. A. Thompson, Secretary, called attention to the present shortage in membership, noting that it was about the same each year at this date, that in the main the lapsed members were always the same, that they invariably reinstated **after** the expense of sending them many notices, striking their names from printed rolls, notification of the A. M. A. to drop them, and upon receipt of notice from that organization, came back into membership status, losing in the dilatoriness involved practically all benefits of membership except the mere name of being listed as a member.

Dr C. H. Ball, Tulsa, moved that it be recommended to the House that hereafter dues for lapsed members, not renewed during the month of January should be \$6.00 and the State Secretary be instructed to collect that amount in each case, the increase not to apply to new members and to any case where it appeared reasonably certain that circumstances con-

nected with the case caused the lapse and it was not due to the member's negligence. Motion discussed by Drs. Heitzman, Slover, and Risser. Carried.

Dr. C. W. Heitzman, Muskogee, discussed operation of Medical Defense with reference to the requirement that dues be in the hands of the State Secretary during the month of January; otherwise, that defense be accorded from the date of issue of certificate of membership only. He proposed that date of defense date from date that the member paid dues to the county secretary and not necessarily from date dues were received by State Secretary. Dr. Thompson stated that experience and operation of medical defense showed that procedure was fraught with danger and liability of misuse of the fund; that other states required dues to be in the hands of the organization handling defense; that already many cases had arisen where the county secretary in his attempts to aid a member had ante-dated checks and used various devices to place in good standing a member who on the date of alleged malpractice was not in good standing though both the secretary and his member had had repeated warning by notice in the Journal, personal notification by mail, that lapse was about to occur; that the real idea of medical defense was not to **insure** the member as does indemnity insurance, costing many times more, but to protect that large majority of members who in their carelessness disregard and ignore the constant liability and menace of malpractice charges, thus lowering the mutual defensive ability of the entire profession of the State; that Oklahoma now extends more liberal defense, both as to actual money expended and wide range of cases defended than any other state operating medical defense and finally that probably the end sought to be attained in organization of this feature—a general upbuilding of esprit de corps and real pride in the total or mass achievements of our profession—had not been the result of this work, as was evidenced by the total lack of appreciation on the part of the member defended and his fellows in their failure to cooperate in other features of interest to the profession and of great importance; that so much selfishness had been exhibited in many of these cases, that it must be concluded that the statement of a Councilor, skeptical as to organizing the members heretofore defended at a cost of many hundreds of dollars to the Association, could not be, "for they are, as a rule, not of the 'class' to be depended upon". It was also suggested that the plan of withdrawing medical defense for a time be considered, that it was hardly worth while to defend cases of malpractice when they were undoubtedly being inspired by members of the Association who

should cooperate in defense rather than tear it down by sly innuendo and veiled attack. The case of a certain Tulsa physician voluntarily appearing against 2 reputable Tulsa men in a case without merit, report that he was once before involved in a similar case as the possible inspirer of it, and who now himself faces two suits for malpractice, but inconsistently demanding that the Association defend him, was cited as one of the highly irritating experiences to be met. Also it was noted that in nearly no case was the charge of the defendant that some other physician inspired the suit, noted. It was finally determined to recommend that a committee be appointed to study the medical defense problem, with full power to act and formulate such regulations as the facts warranted.

Motion prevailed to recommend that the President appoint a committee to redraft the Constitution and By-Laws of the Association, eliminating the many sections now inapplicable by reason of changed conditions and amendments, that upon completion of such draft it be submitted to the various county societies for consideration and that upon approval of sixty per cent. of the societies returning vote thereon it be published as the Constitution and By-Laws of the State Medical Association.

**The Auditing Committee of the Council** reported:

McAlester, Oklahoma, May 17, 1921. To Whom This May Concern:

This is to certify that we have examined the books of Dr. Claude Thompson, Secretary-Treasurer-Editor of the State Medical Association of Oklahoma, from May 1, 1920 to April 30, 1921 inclusive and find them correct. Signed: L. A. Mitchell, J. L. Austin, A. S. Risser. Auditing Committee of the Council, Oklahoma State Medical Association.

**Subcommittee of the Council** appointed to report and make recommendations in the case of Fuller v. Washington and Kurtz v. Nowata County made the following report:

**To the Members of the Council of the Oklahoma State Medical Association:**

Gentlemen: Your committee begs leave to report as follows: In the case of Dr. R. T. Fuller vs the Washington Medical Society, we recommend that the Washington Medical Society be directed to accept Dr. R. T. Fuller as a member of said society.

In the case of appeal of Dr. R. L. Kurtz vs. the Nowata County Medical Society, it appears that Dr. R. L. Kurtz was expelled from said society for unethical conduct and that he used and is still using advertising methods offensive to said society and to their code of ethics. We recommend that the action of the Nowata County Society be sustained. However, we

further recommend that should Dr. Kurtz refrain from said advertising and conduct himself in a manner in accordance with the usage of the code of ethics then he be restored to membership in his county society.

We further suggest and recommend that the real province of the respective county societies is not so much to put eligible men out of the influence of their membership but rather get them as members, thereby helping to get rid of their disability, especially when said candidates show a disposition to conduct themselves in a manner becoming ethical physicians. In other words lend a helping hand to every physician who desires affiliation with us through the medium of our various county medical societies.

Respectfully submitted, C. W. Heitzman, Chairman, M. E. Stout, L. C. Kuyrkendal.

Recommendations embodied in the above transactions were ordered made to the House as the report and conclusions of the Council.

The Council then adjourned.

C. A. Thompson,  
Secretary-Treasurer-Editor.

**The General Meeting, Tuesday May 17th, 8:00 P. M.**

Called to order by the President Dr. G. A. Boyle. Invocation by Reverend Fenn, McAlester. Address of Welcome was made by Dr. R. K. Pemberton, Mayor of McAlester, in a manner and vein fitting the occasion.

Response was made by Dr. A. S. Risser, Blackwell.

Special eulogies were rendered by Drs. C. W. Heitzman, Chairman of the Necrology Committee, and Dr. LeRoy Long on Dr. John W. Duke. (Full text of these addresses are included in this report under committees).

The President then delivered his annual address which is printed as the first article of this issue. Meeting adjourned.

**Reports of Officers and Standing Committees.**  
**Report of Necrology Committee, McAlester, May 17, 1921.**

#### **In Memoriam**

Lives of great men all remind us  
We can make our lives sublime,  
And, departing, leave behind us  
Footprints on the sand of time.

Footprints that perhaps another,  
Sailing o'er life's solemn main,  
A forlorn and shipwrecked brother  
Seeing, may take heart again.

Since our last annual meeting death has claimed from our membership:

C. B. Ballard, Kingston, Oklahoma.



B. E. Braselton, Miami, Oklahoma,  
 W. H. Crutcher, Bartlesville, Oklahoma,  
 J. W. Duke, Guthrie, Oklahoma,  
 S. M. Hunter, Oklahoma City, Oklahoma,  
 Wm. Johnson, Peckham, Oklahoma,  
 C. H. Mahar, Spiro, Oklahoma,  
 J. M. McComas, Elk City, Oklahoma,  
 O. P. McNair, Oklahoma City, Oklahoma,  
 J. P. McRae, Coalgate, Oklahoma,  
 E. Pleas, Collinsville, Oklahoma,  
 A. Webb, Scipio, Oklahoma,  
 W. J. Witt, Colony, Oklahoma.

**Address of Dr. C. W. Heitzman, Muskogee,  
 Chairman, Necrology Committee.**

Vainly do we endeavor to unshackle our steps from destiny and to catch some authentic glimpse of tomorrow. But we fall back upon to-day which has outlasted so many tomorrows as the only ground we have to stand upon, however momentarily slipping from under our feet.

Thus we console ourselves with the construction of a machine that needs no constructor and acting by a law that implies no law-giver, and so compose ourselves into a stoical severity of attitude, sit down to contemplate the mechanical drama of the universe of which we are in part actors.

This hour we are with our dead. We would have you think of nothing else to-night, of nothing but those things which will soften your heart and open it to old affections and old times. It is as if your departed ones would speak to you themselves and in their names I will speak to you now. Let us speak softly lest we wake them. I would be glad to see their eyes again, and to see them smile. There is a smile upon their faces, but it is fixed and changeless. I would have it come and go. That shall be in the time to come. We will not wake them.

Let us talk of them in their sleep as they used to be when we were journeying through life, in the past cheerful time.

In our memories the lives of our departed have the beauty of a fair clear morning, as we look from the summit of a hill on the world. See where it lies before us in a sun-lighted valley bright with the winding river and shut in by swelling hills. Domes and towers and palaces rising from the country in a glittering heap and shining in the sun like gold.

Our friends in their sleep so beautiful and calm, so free from trace of pain, so fair to look upon. They seem as creatures fresh from the hands of the Creator, waiting for the breath of life, not ones who had lived and suffered death.

As we stand with bowed heads and think what earth is, compared with the World to

which their spirit has winged its flight, if one deliberate wish expressed in solemn terms would call them back to life, which of us would utter it?

If there be any who have never known the blank that follows death—the weary void—the sense of desolation that will come upon the strongest minds when something familiar and beloved is missed at every turn—the connection between inanimate and senseless things, and the object of recollection, when every household god becomes a monument and every room a grave.

If there be any who have not known this and proved it by their own experience, let them not reject the lesson that death teaches, for it is one that all must learn. It is a mighty universal Truth.

When death strikes down the human form and lets the panting spirit free, a hundred virtues rise in shapes of mercy, charity and love, to walk the world and bless it. Of every tear that sorrowing mortals shed on each green grave, some good is born, some gentler nature comes.

In the Destroyer's steps there spring up bright creations that defy his power, and his dark path becomes a way of light to Heaven.

Oh, if my soul can fling his dust aside,  
 And naked on the Air of heaven ride,

I 'st not a Shame, I 'st not a Shame for Him  
 So long in this clay Suburb to abide?

Or is *that* but a Tent where rests anon

A Sultan to his Kingdom passing on,

And which the swarthy Chamberlain shall  
 strike

Then when the Sultan rises to be gone?

Respectfully submitted,  
 Charles W. Heitzman, Chairman.

**A Tribute to Dr. John W. Duke by Dr. Le-Roy Long, Oklahoma City.**

Mr. President, Fellows, Ladies and Gentlemen:

I come to join you in paying our respects to the memory of one of the great personages of our profession. I come to speak a few words as a tribute to the memory of my personal friend who has been taken away.

Two years ago I had the honor to formally introduce Dr. Duke to the House of Delegates after he had been elected to the presidency of this Association. At that time I spoke of his high ethical standing, of his learning in medicine, and of his loyalty to the profession. With a conviction that I voiced the sentiments of the physicians of this State, I made the statement at that time, that, in my judgment, his election augured well for the future of our organization.

On that day two years ago we could not see the lowering clouds. As we peered anxiously and hopefully into the future, there was nothing to indicate the tragedy that came last October. As I stood by his side on that occasion I did not know that within a few months I would be called upon to again stand by his side, but this time a helpless witness of an unequal struggle. On that auspicious day two years ago we expected to come together at the meeting this year and address him as our titular head; we did not know then that we would come here in sackcloth and ashes.

I do not believe that anyone will disagree with me when I say that Dr. Duke was one of the great, outstanding men in the profession of this State. I do not believe that anyone will disagree with the statement that he was one of the great citizens of this commonwealth. As a physician he occupied a pre-eminent place in the special field of medicine in which he chose to work. When his name was mentioned his conferees invariably thought of the abstruse problems that come for solution to him who has to do with the defects of the mind. When the subject of mental diseases was discussed we turned expectantly and confidently as we listened for the last and definite statement from the great alienist within our borders. By his associates he was regarded as what he truly was—a master of his specialty.

But while Dr. Duke was a great specialist, he was not a narrow man. Indeed, just the reverse was true, for there was no man who was more keenly interested in the up-building of medicine, who was more loyal to the profession, and who did more to make it a great vital, moving force for the good of humanity. He believed in the fine traditions that came down from the days of the fathers. He worked for regularity and high standards. He despised bickering and jealousy. He hated deep down in his soul hypocrisy and fraud. In connection with his professional relations the lines were distinctly drawn. His friends were legion and he would sacrifice his right arm for them. He had enemies because he was unsparing in his denunciation of chicanery and double dealing.

I knew this man for many years. For many years he was my close personal friend. The friendship that existed between us grew up spontaneously. His activities were in a field of medicine as far removed from the field in which I have worked as it is possible for one specialty in medicine to be removed from another specialty; and yet, we were drawn toward each other in a mystic and tender way.

And such a friend! His integrity, his constancy, his implicit confidence caused me to tread my way with care, for the friendship of which I speak was a holy thing.

Dr. Duke was a brave man. The spirit of the Cavalier was in his soul. Like all brave men, he did not hesitate to take a position on any pertinent matter. He never straddled a question. He was never found upon neutral ground. It was never difficult to determine where he stood. The merest suggestion of irregularity was spurned without further consideration. His every act proclaimed "Thou can'st not serve God and Mammon".

One of the outstanding characteristics of Dr. Duke as I knew him was his profound religious conviction. His faith was like unto the faith of a little child. It bordered almost upon the superstitious. Often have we talked about the successes and failures, the vicissitudes, the disappointments of this life; often have we wandered into the mysteries of the life to come, and as I have talked to him I have felt that surely here is a man who heard aright the words of the Master coming down through the centuries "But whosoever drinketh of this water shall never thirst".

Our President, our friend, our brother has been taken away, but his work is not finished. I verily believe that while we are assembled here tonight his influence hovers over us. We cannot see with our natural eyes, but when we visualize the good that this man has done we can confidently point across the mystic divide and exclaim "There stands one who has served".

Some day the pitcher will be broken at the fountain in the case of each of us, and we will be called upon to take a journey to a far country. In preparation for that solemn day, and in anticipation of a happy meeting, let us profit by the beautiful deeds of him who has gone before.

**Report of the Committee on Health Problems in Education.** With special reference to organization of public health.

#### County Work

McAlester, May 17, 1921.

The committee begs to submit the following study on Public Health work in the state of Oklahoma. Report is based on the study of a few typical counties including the most populous in the state. Our conclusions are:

1st. The county health work in the average county of Oklahoma has neither public interest nor public information sufficiently assimilated to make it mandatory upon the official to furnish an adequate health work. i e a. By proper health officer devoting full time and having proper qualifications b. By having proper facilities including clerical and scientific help to study the conditions or to alleviate those already known c. By giving

proper nursing forces to make valuable to the community the results of these labors.

2nd. That the public of Oklahoma is not sufficiently informed as to the condition of the communicable and preventable diseases and that these diseases may be greatly ameliorated if not eradicated by proper care (education and properly manned county Health Departments).

3rd. That certain endemic diseases affecting the industrial life of a community are prevalent and can be eradicated in many of our counties as hookworm, malaria and smallpox.

4th. That most of the counties in this state are in need of school inspection as to water, sanitation, and physical condition of the children.

5th. That the open tubercular of which the public does not realize fully the menace should be properly cared for.

6th. That some efforts should be made in the more populous counties to afford hospital facilities for communicable diseases.

Therefore, we suggest that the Association go on record and advise the improvement of county health organization under the proper supervision of the State Health Department.

2nd. That the county commissioners be urged by their local medical societies to provide more adequate facilities for county health work.

3rd. That the State Medical Association attempt educational propaganda to the people of the state to meet these ends. a. By newspaper articles. b. By Public health literature in schools and clubs under this association's leadership. c. Personal effort of each member.

4th. Committee be appointed to outline above program.

Edw. F. Davis, J. T. Marten, G. A. Wall.

#### **Hospital Committee; Condensed Report of Transactions\*.**

The meeting of the Oklahoma State Hospital Association at McAlester, May 18th in conjunction with the Oklahoma State Medical Association was very successful. At a banquet given at 6 p. m. at Hotel Busby, Miss Parsons, Inspector for Training of Missouri and Oklahoma, gave a very constructive although brief address, and at 8:15 the following program was presented in the First Baptist Church.

Invocation..... Rev. W. A. Treadwell  
Music—(Selected)..... Temple Male Quartet  
Address..... Dr. Fred S. Clinton, President  
Address..... Standardization of Hospital Service..... Dr. Jabez N. Jackson, Kansas City, Mo.

\*Note Chairman's address this issue, section on Chairman's Addresses. Full publication or abstracts of other addresses will be made later.

Address.... "More Hospitals, Bigger and Better Hospitals, a Health Necessity"..... Dr. C. M. Rosser, Prof. of Surgery, Baylor University College of Medicine, Dallas, Texas  
Music—(Selected)..... Mrs. G. H. Newton  
Address—"Some Remarks on the Functions of the Hospital"..... Dr. LeRoy Long, Dean, University of Oklahoma School of Medicine  
Committee on Hospitals  
Fred S. Clinton, Chairman  
C. A. Thompson.

#### **REPORT OF THE SECRETARY-TREASURER-EDITOR.**

(For the year May 1, 1920—April 30, 1921.)

To the House of Delegates, Council and Members of the Oklahoma State Medical Association:

In conformation with requirements of the Constitution and By-Laws, I herewith submit condensed report of the various activities of my office for the time indicated.

Every transaction in detail has been submitted to the Auditing committee of the Council, accompanied by sworn statement of Auditor employed to examine and report as to correctness of the various receipts and expenditures.

#### **Membership:**

Our membership April 30, 1920 was.... 1638  
Membership April 30, 1921..... 1645

Attention is called to the fact that December 31, 1920, membership was 1736, nearly one hundred more than at the end of the fiscal year, April 30th, that substantially all this number were members previous to 1920, but who neglected to renew membership until after your association had gone through the unnecessarily costly course of notifications, tedious, expensive checking—always subject to errors and consequent hard-feelings, removal from fixed, printed rolls of this and the American Medical Association, then replacement, equally costly and subject to error. It is the opinion of some of our advisors that this course of injustice to the great majority, by a minority, is inexcusable and should call for sufficient penalization financially in the way of increased dues formembership which has been allowed to lapse, after certain date, to make the matter at least of sufficient interest and return of income to approximatey carry the expense we inevitably incur by no fault of your officers and constituent secretaries. There seems to be no reason why the State Association should not require the sum of \$6.00 per capita from members failing to renew as late as March 31st each year except in exceptional cases of absence from the country, illness, etc.



**Medical Defense:** This feature has maintained its uniform history of complete success in so far as protection of the members' interests in the matter of the highest class of powerful legal aid and care of every right involved is concerned. It seems to be the regretful conclusion, however, that this mutual defense of the individual has not as a rule incited that keen, appreciative, reciprocal pride and interest in the welfare of the problems of all our membership, the problems, though not directly affecting the individual, do without question affect us en masse, in a large majority of the men your Association has rescued, fought for and defended more ably than he could have defended himself. We have had to observe almost indecency in the frantic haste the member and his secretary displayed in hurrying in his dues, accentuating and stressing the importance of prompt return of receipt from the State Secretary, voluminous correspondence and detail, only to receive absolute silence and humiliating ignoring of appeals to the same secretary and member *called upon them*, and their counties for aid in matters which could only be successfully accomplished through their cooperation, a cooperation we had every reason to expect. You are advised also of another significant though irritating feature connected with nearly every case. That is the almost universal plaint from the defendant applicant for legal aid, that "A certain doctor here 'ribbed' up this suit"—"So and So is behind this suit because of jealousy etc., etc." It goes without question that if we are attempting to quench the flames destroying our structure at one end, while a part of us is busily engaged in pouring oil and combustibles on the other the sooner we rid ourselves of such members or abandon defense entirely, the sooner we will have adopted the true course. These statements are not made to you in pique or on sudden resolution, they are born of accumulated painful experience and slowly acquired humiliating knowledge. While perhaps the suggestion that you now seriously consider whether we should continue this feature, may be misconstrued, you are advised briefly of the situation in order that you may take such action as may be thought best. Possibly adoption of a "holiday" or "vacation" in expending hundreds of dollars upon one individual who demonstrates his gratitude by selfish silence when the traditions of his profession, the science bringing him and his family a livelihood, are assailed, might be partially effective in awakening a feeling of just reciprocity, though the awakening would be rough and rude. You are also advised as seems should be your due of knowledge of this feature, that almost without exception, those individuals who by their own negligence lapse their membership, later find

themselves needing defense, take it as a personal affront and heap criticism and complaint upon the office of your Secretary when strict application of the rules of Medical Defense is applied to their case. In more than one instance clear dishonesty has been exhibited by certain members in this connection. This information may now be verified by inspection of the documentary evidence in the files of the Medical Defense papers.

List of cases handled from May 1, 1920 to April 30th, 1921.

Kathleen Glenn, a minor by her mother and next friend, Mrs. W. H. Glenn, Plaintiff, vs. Dr. W. Eugene Dixon, Defendant.	No. 25465. Filed in the District Court of Oklahoma County, Okla. on September 6, 1919. Tried and judgement ren- tered in favor of defendant on 1-9-20. Suit for \$25,000.
Mrs. Pauline Sutton Plaintiff, vs. Dr. Earl D. McBride, Defendant.	No. ----- Filed in the District Court of Oklahoma County, Okla., on 5-2-20. Dismissed on 2-26-21. Suit for \$25,000
John R. Ashworth, Plain- tiff, vs. McLain Rogers, Defendant.	No. 10446. Filed in the District Court of Custer County, Okla. on 3-25-21. Pending on de- murrer.
Ollie Berry, a minor by his mother and next friend Minnie Berry, Plaintiff, vs. Dr. J. F. Capps and Dr. R. E. Rhodes, Defendants.	No. ----- Filed in the District Court of Tulsa County, Okla. on 1-26-21. Suit brought for \$35,000. Case at issue, will probably be set for any time within next 30 days.
Stewart Wilson, Plaintiff, vs. Dr. R. A. Felt, Defendant	No. ----- Filed in the District Court of Tulsa County, Okla. on 12-7-20. Suit brought for \$5,000. On 4-20-21, a dismissal signed by defen- dant was filed, by attorney representing defendant. Filed attorney's lien and case is merely pending now on right of attorney to en- force his lien.
George P. Long, Plaintiff, vs. Dr. Francis R. First, Defendant.	Petition filed 3-19-21, in the District Court of Osage County, Okla. Hospital bill etc., \$849.50. Pend- ing on demurrer.
Amelia Long, Plaintiff, vs. Dr. Francis R. First, Defendant.	No. ----- Filed in the District Court of Osage County, Okla. on March 19, 1921. Suit brought for \$5,000. Pend- ing on demurrer.
Joe Robb by J. Wesley Robb, his father and next friend, Plaintiff, vs. A. P. Gearhart and W. M. Leslie, Defendants.	No. ----- Filed in the District Court of Kay County, Okla. on 2-25- 21. Case at issue now. Suit for \$25,000.
Martin Phillippi, jr. a minor, Plaintiff, vs. Dr. R. I. Allen, Defendant.	No. 3472. Suit filed in the District Court of Nowata County, Okla. in August 1919. Case at issue and probably will be set for trial during coming month.

J. F. Pool for herself, and Della Pool, Ollie Pool, Olvin Pool, Verly Pool, by J. F. Pool, next friend.	Plaintiffs,	Petition filed 12-23-20, in Garvin County District Court. Suit for \$20,000. At issue.	Time Deposit, 4 per cent. . . . . 2,500.00 War Savings Stamps . . . 904.00 Total, Medical Defense Fund, May 1, 1921 . . . . . \$5,381.42
J. K. Lindsay and J. B. Morgan.	Defendants.		
Pearl Spohn,	Plaintiff,	No. 1968.	Oklahoma State Medical Association
J. L. Adams,	Defendant	Suit filed in the District Court of Mayes County, Okla. for \$20,000, on Sept. , 1919. Verdict for Defendant.	<b>Receipts</b>
John F. Cannon, Plaintiff,	vs.	No. 8435.	May 1, 1920, Balance
Dr. W. C. Smith, Defendant	vs.	Filed in the District Court of Tulsa County, Okla. on 1-17-19, for \$10,000. Case at issue.	on hand . . . . . \$3,698.12
Henrietta Larahee, Plaintiff,	vs.	No. 5717.	Advertising . . . . . 4,670.85
Dr. Fred M. Boso, Defendant.	vs.	Filed in the District Court of Tulsa County, Okla. Case at issue.	Interest, (Liberty Bond) . . . . . 21.25
			Copies . . . . . 1.00
			County Secretaries . . . 7,096.00
			Short Time Loans . . . 1,500.00
			\$16,987.22

### Finances:

Condensed report is attached of receipts and expenditures showing the source from which our funds are derived and the items for which expended. For the first time in our history, due to unprecedented costs of Journal production and very high expense, we faced a large deficit at the end of 1920. To partially cover this your Secretary-Treasurer-Editor made a personal loan and applied it to the Association's funds to tide us over until 1921 receipts relieved the situation. This process may have to be repeated again, but it is hoped that gradual decline in costs all along the line will permit us to work out the matter without further increase in dues, which had to be made for the year 1921.

## FINANCIAL STATEMENT

### Medical Defense Fund.

#### Receipts

May 1, 1920, Balance	
on hand, in bank . . .	\$1,475.02
Surrender of Time Deposit . . . . .	750.00
Interest on Time Deposit . . . . .	115.00
Oklahoma State Medical Association	1,600.00
	\$3,940.02

#### Expenditures

Certificate of Deposit \$	750.00
Attorney's Fees . . . .	1,187.60
W. M. Phares, Xmas Present . . . . .	25.00
Balance, Cash on hand, in Bank, May 1, 1921 . . . . .	1,977.42
	\$3,940.02

May 1, 1921, Balance	
on hand in bank . . .	\$1,977.42

#### Expenditures

Reporting Annual Meeting, Okla. City.	\$ 347.79
Printing . . . . .	\$7,097.51
Secretary's Salary . . .	1,200.00
Stenographic and Clerical Work . . . . .	1,063.24
Office Supplies and Miscellaneous Exp.	132.68
Press Clippings . . . . .	40.00
Telephone and Teleg.	128.36
Multigraph Work . . . .	57.50
Postage . . . . .	191.40
Meetings in New Orleans . . . . .	339.82
Meetings in Okla. City	128.40
Refunds . . . . .	26.50
Treasurer's Bond . . . .	10.00
Auditing Books . . . . .	15.00
Edison Mimeograph . . .	50.00
Duke Funeral Expense—Flowers . . . . .	22.20
Short Time Loans and Interest . . . . .	1,507.49
Transfer to Medical Defense Fund . . . . .	1,600.00
	\$13,957.89
Balance on Hand in Bank . . . . .	3,029.33
	\$16,987.22

May 1, 1921, Balance	
Cash on hand, in Bank	\$3,029.33
Liberty Bond . . . . .	500.00
Total Oklahoma State Medical Assn., May 1, 1921 . . . . .	\$ 3,529.33
Total, Medical Defense Fund, May 1, 1921 . . . .	5,381.42
Total, ALL FUNDS, May 1, 1921 . . . . .	8,910.75

**Journal:** Your Journal began the year 1921 much enlarged in size, and it is hoped improved in mechanical and artistic appearance. In the

latter two respects you are advised that it is said to be one among the mechanically high class publications of the country. Of course from the standpoint of scientific worth it is only a reflection of whoever the writer happens to be. This change in size has naturally increased cost of publication, but so far it is believed we shall be able in the end to make it do what it was doing before the war, carrying all its own costs and providing hundreds of dollars worth of necessary miscellaneous printing demanded by the various functions of the Association, from our advertising receipts alone.

**Advertising:** You are aware that certain classes of advertising matter cannot be accepted for inclusion in our pages, nor is it wanted, but this proper limitation demands that every bit of worthy advertising be secured and maintained where such matter is pertinent to the doctor. One of the greatest incentives to growth in advertising is your memory that these who serve you well should in turn be served by you upon every opportunity. It is nothing short of injustice for you to expend a dollar with a house not supporting your Journal with advertising patronage, while your advertising supporter offers you equality in price and quality.

**Duke Memorial Fund:** Honorable Robert L. Williams, Federal Judge, who as Governor appointed Dr. John W. Duke State Commissioner of Health knowing the great qualities of our departed friend and citizen advised this office in November 1920 that it was his intention to have made and placed in the University Hospital at Oklahoma City, a suitable bronze memorial tablet. At the time he suggested that our Association have made an oil painting of proper quality and install that tribute to our departed President in the Historical Society, State Capital, Oklahoma City. This move was started by designation of Dr. LeRoy Long, Oklahoma City, trustee for receiving such offerings as our members felt called upon to give. Informal statements from Dr. Long indicates that many county societies have neglected this matter which should have fitting response rather than neglect.

**Other Activities:** Certain work not directly undertaken by our Association, but which concerned every physician and citizen of Oklahoma, was handled through your Secretary's office in 1920. The Council has been submitted detailed report of that work. Its scope and final disastrous ending will not find publication in the Journal unless it is specifically directed by the House of Delegates. The only comment necessary is that by complete neglect and lack of cooperation from many counties, and by the same fatal process on the part of

the individual our profession seems to have signally failed in fulfilling the functions fondly believed to be those of propriety on the part of many state organizations.

Respectfully submitted,

Dr. Claude Thompson, Secretary-Treasurer-Editor.

## PERSONAL AND GENERAL

Dr. Wm. R. Barry, Bradley, has located in Alex.

Dr. J. R. Preston, Weleerka, is visiting Chicago Clinics.

Dr. W. B. Harned, Walters, visited relatives in Kentucky in May.

Dr. L. E. Emanuel, Chickasha, visited Chicago and Rochester clinics in April.

Dr. Victor M. Gore, Clinton, has been appointed City Superintendent of Health.

Dr. Benj. Skinner, Pawhuska, has returned from six weeks visit to California and Mexican points.

Dr. A. L. Share, Kingfisher, was confined to a hospital bed at Oklahoma City by reason of illness in April.

Dr. J. W. McClerkin, Ponca City, is in New York where he will spend the summer attending various clinics.

Dr. C. F. Loy, McAlester, is urging that city to adopt ordinances requiring physical examination of food handlers.

Dr. F. P. Von Keller, Ardmore, is reported to have successfully undergone a severe surgical operation recently.

Dr. and Mrs. A. E. Davenport visited New Orleans in May where Dr. Davenport did postgraduate work in Tulane.

Dr. A. L. Blesh, Oklahoma City, attended meeting and read a paper before the Texas State Medical Association at Dallas.

Dr. W. N. McClurkin, Ponca City, is in New York where he will spend the summer doing special work in surgery and obstetrics.

Dr. Chas. T. Shrader, Bristow, is remodeling a large residence for use as a hospital. Competent superintendent nurses have also been engaged.

Dr. F. H. Clark, Oklahoma City, attended the Alabama State Medical Association at Montgomery in April, reading a paper in the surgical section.

McIntosh County Medical Society met at Checotah April 12. Drs. White, Stocks, Nesbitt and King, Muskogee, were out of town attendants.

Dr. H. C. Weber, Bartlesville, headed a citizens committee empowered to select a site for the new hospital. The site selected was given endorsement.

Dr. H. C. Lloyd, Hobart, who has been absent since early in the war when he joined the army, has returned and formed a partnership with Dr. J. M. Bonham.

Dr. W. C. Vernon, Okmulgee, and Miss Emma McConnell, Springfield, Mo., were married in the latter city April 5th, after which they visited Texas points for two weeks. They will reside in Okmulgee.

Dr. T. B. Hnson, Enid, visited his old home folks in Arkansas in May for Decoration Day observance, after which he took in Shriners meeting Des Moines, going from there to Chicago where he will stay until late in June.



**Dr. Earl D. McBride**, Oklahoma City, is the fortunate selection as one of the representatives of the Rotary Clubs of the United States to the International meeting in Scotland. Dr. McBride will visit European clinics during his stay.

**Dr. J. Hoy Sanford** of Muskogee, who has been doing Urology for the past 8 years, has moved to St. Louis, Mo., to become associated with Dr. John R. Caulk, Professor of Urology, Washington University, Medical School and Urologist to Barnes Hospital.

**Radium** valued at \$3,500 by Drs. Lain and Roland, Oklahoma City, which disappeared while attached to patient, was mysteriously returned after several weeks absence. The only explanation was that the patient had "intended" to return it sooner but overlooked the small matter.

**Dr. J. T. Martin**, Oklahoma City, for several years a superintendent of health of that city, is to be "ousted", according to press dispatches. It seems just to say that his home city may find his equal, but more than likely they will not, for his administration was that of the highest class, a rarity among Oklahoma towns.

**Dr. D. W. O'Leary**, Empire City, was recently arrested charged with violation of the prohibitory laws. Dr. O'Leary is not a member of the Medical Association, though formerly was of Craig County, during which time the Medical Defense Fund expended several hundred dollars in defense of him for alleged malpractice.

**Lectures to Mothers** with a view to lessening summer infections are being delivered by Drs. S. R. Cunningham, R. E. Looney, Leila Andrews, W. M. Taylor, H. Coulter Todd, physicians, and John Payne and C. L. White, dentists, Oklahoma City. The talks were delivered at Scott-Haliburton's department store and at such hours as would enable a large attendance.

**The London Lancet**; Oldest Medical Paper in the World. Weekly. Founded 1823. Annual Subscription \$12.00. The Lancet will hereafter be published by the Oxford University Press. Subscriptions to be mailed to American addresses should be sent to the Oxford University Press 35 West 32nd Street, New York. Editorial communication should be sent to Oxford University Press, Amen Corner London, E. C., England.

**Dr. Everett M. Lewis**, Alexander Bldg., Tulsa, reports that in May while changing locations and his car was parked in Tulsa some one stole a hand bag containing all his credentials, such as Fellowship diplomas issued by the Universities of Louisville and Tennessee, certificates from Oklahoma, Kansas, Texas, Arkansas. He asks that publicity be given this loss and that anyone coming in contact with the papers, of no possible value to any except himself, advise him and aid in their return.

**Dr. Joseph Singer Halstead**, Breckenridge, Mo., said to have been the physician of Henry Clay, celebrated his 103rd birthday in April. One hundred and three roses, the gift of every man, woman and child in Breckenridge, were presented to him. Dr. Halstead held open house to his many friends, displaying many relics of Mr. Clay which he has treasured since his location in Missouri in 1860. He boasts the remarkable fact that he is the fourth owner of his farm home, the first being the king of Spain, then Napoleon Bonaparte, then the United States.

**Dr. Frank H. McGregor, Under Arrest.** Dr. McGregor of Mangum, recently while "speeding" in Muskogee suddenly heard a peremptory "stop" the tone so commanding that he did that which the entire Hun Front along the Hindenburg Line in Flanders could not do, he "stopped". His mild "What for" availed not with the motor cop, that worthy's dictum, "to the police station for you". Only the entreaties of Dr. Thompson, sitting in the back seat whose guest was doing the driving, permitted the many friends of the doctor from Mangum greeting him the next day at McAlester.

**Dr. Geo. H. Wetzel**, Sapulpa, was recently haled into court before his Honor, Dr. J. Wade Bone, Mayor of Sapulpa, to explain a charge of violating the sanitary ordinance in that he dumped a load of trash in the city limits. His Honor heard Dr. Wetzel's plea that he did not know he was violating the law, and assessed the costs of the action only.

**The Woodward County Medical Society** met with Doctor Bagby and staff at the Western Hospital at Supply on Wednesday May fourth. A program commencing at ten a. m. and lasting until five p. m. was participated in by all. At noon a luncheon was served at which Dr. Hugh Scott of Oklahoma City, who was the Guest of Honor, gave a very interesting talk. After lunch Dr. Bagby took all the visitors on a tour of the institution. All were favorably impressed with the size of the plant and the amount of work being accomplished for these unfortunates. The place is wonderfully efficient, and reflects great credit upon the officials. The day was very profitably spent by the twenty-five physicians and their wives who attended.

**Proposal for Erection of Memorial Building to Dr. Duke** It was proposed by Dr. Heitzman that the Oklahoma State Medical Association by popular subscription erect a home for said Association in memory of our deceased President, Dr. John W. Duke, of Guthrie, Oklahoma. It was shown by Dr. Heitzman that if 1200 of our present membership, which numbers 1700 would contribute as little as \$100.00 each, it would give us a sum total of \$120,000. Of this amount as a starter \$50,000 could be expended for a building, leaving a balance of \$70,000 which, invested at a low rate of 6%, would create an annual fund of \$4,200.00 for maintenance. The suggestion provoked considerable discussion, Dr. E. S. Lane, of Oklahoma City, and Dr. Risser, of Blackwell, making very enthusiastic talks in favor of the proposition. A number of other physicians made silent talks, in the shape of contributions to the extent of \$100.00 each.

**Oklahoma Soldiers** and others entitled to governmental care will not have the privilege of receiving their treatment in Oklahoma. It is said that representatives of the various Oklahoma cities seeking to have a hospital erected here are disappointed and their efforts will go for naught. It is quite certain that neither the clubs representatives or members of Congress and committees having the selection of these locations now recall that Oklahoma sent the first many thousands of men to war at a per capita cost of less than two dollars while the patriotic old state of New Jersey and many others managed to collect more than \$16.00 per capita for the members of their local boards and others concerned with creating an army. Simple justice, it seems, should have made this fact weigh heavily with the deciding powers, so heavy that failure of recognition of the service can only be denominated as ingratitude and selfishness.

**Ft. Worth, Texas**, possesses a citizen said to have adopted the remarkable course, upon being angered by receipt of a letter from a physician asking for bids for a quantity of letterheads, paper etc., of "getting back" at the doctor by writing, "I am in the market for bids for one operation for appendicitis. One, two or five inch incision - with or without ether - also with or without a nurse. If appendix is found to be sound, want quotation to include putting same back and cancelling order. If removed, successful bidder is expected to hold incision open for about sixty days as I expect to be in the market for an operation for gall-stones at that time and wish to save the extra cost of cutting". So saith the Kansas City Star, forgetful, however, in perpetrating the crudity, that a doctor is a servant of science with a profession, demands no forty four hour weeks, time and a half for overtime, laying off half of Saturday and all day Sunday; nor does he charge one person as much for his "envelopes" as another, sometimes delivering his bills and letterheads over weary months only to finally "cancel the order" his services rendered at total loss.

**Dearth of Doctors** is reaching alarming stages in some Eastern sections, especially noticeable in the New England states. The town of Otis, Mass., it is said recently offered a bonus of \$500.00 annually for a physician. Others are reported to offer various inducements including free houses, automobiles and a guarantee of sufficient income. This particular situation may be merely sensational report; however, observers for several years have believed that such scarcity would occur, certainly in the rural communities where social opportunities, unremunerative work and hardships out of proportion to that experienced by the physician of larger cities lends anything but attractiveness to the young man worth while, and no others are wanted. Many localities in Oklahoma are now poorly, if at all, supplied, with competent physicians for those reasons, while the larger centers are relatively overcrowded. The blame can only be fixed upon the class of people who will suffer first and most. Until they discard the principle of being a Saint to the doctor when ill and a Devil to him when well, we know where the trouble lies. Many Oklahoma physicians can hardly cross any quarter section within ten miles of their locations without recalling some case of their services being remembered with ingratitude and loss.

The **Chairman of Hospital Committee** attended the meeting of Texas Section Clinical Congress of the American College of Surgeons at Dallas, Jan. 7th and 8th, 1921; the meeting of the Oklahoma Section of the Clinical Congress of the American College of Surgeons at Oklahoma City, Feb. 21 and 22, 1921. These meetings as you know had to do with hospital standardization and consisted of the section meeting as well as banquet and open meeting where all phases of the subject were discussed. Another feature of great interest in the latter part of March Hospital Management suggested the idea of National Hospital Day for the purpose of making every community better acquainted with its hospitals, and on May 12th the first National Hospital Day was observed both in the United States and in Canada. Your Chairman was appointed State Chairman by the National Hospital Day Committee. The May issue of Hospital Management says: Dr. Fred S. Clinton, Oklahoma Hospital, Tulsa, Chairman for Oklahoma, appointed the following committee: Dr. J. W. Riley, Dr. A. L. Blesh, Oklahoma City; Dr. Claude Thompson, Muskogee; Dr. McLain Rogers, Clinton; Dr. A. S. Risser, Blackwell; Dr. Walter Hardy, Ardmore; Dr. J. Hutchings White, Dr. William Patton Fite, Muskogee, and Dr. T. M. Aderhold, El Reno. The observance in Oklahoma reflected a great deal of credit on the state committee which used all means of publicity and developed unusual interest among the hospitals."

#### DOCTOR EDWARD H. MARTIN DEAD

Press dispatches as we go to press carry the news to hosts of Oklahoma friends of Dr. E. H. Martin, Hot Springs, that he has departed from us, leaving a void as to professional fitness and ability, citizenship and character of the highest type not to be replaced soon. Dr. Martin was the recognized head of the Arkansas profession. By his executive ability he had perfected an organization capable of rendering the ill the highest class of service probably without exception in this country. He had attained the confidence of practically every medical man of worth in the country and evidenced an active mind and ability not often observed. In organization of medical societies from the county unit, state, Southwest, Southern and A. M. A. he was always noted as a conspicuous attendant lending with his presence more than the weight usually brought by any one mortal. His very strong opinions of matters of the day, formulated from a field rich in experience from observation by a mind of the keenest makeup, made him at once one of the outstanding medical characters of the country.

#### DOCTOR EDWARD H. TROY

Dr. Edward H. Troy, McAlester, died after a brief illness in that city May 22nd. Dr. Troy had not been in good health for several months, and death was brought on suddenly by an attack of bronchial pneumonia.

Dr. Troy was of Irish descent, born in Caledonia, Michigan, 60 years ago. Receiving his literary education in Hastings, Mich., from which he entered and was graduated at the University of Michigan. Prior to that he was a teacher and for a time Superintendent of schools in the city of his birth. After a short time in practice he returned to the University where he was professor of Pathology, after that moving to Detroit where he was assistant health officer for six years. Seeking improvement of health, then impaired, he travelled over the west, finally settling at McAlester where he spent busy years during which time he personally by his energy and ability organized Mercy Hospital, later affiliating with St. Mary's, securing for that institution a valuable corps of nurses. He was a member of many social and civic organizations, a Catholic and member of the Knights of Columbus. Besides a wife, he is survived by eight children several of whom are married. Some of his brothers and near relatives are officials of the Catholic Church, two of them being Brothers, one in Calcutta, India, the other in Bay City, Michigan.

Funeral services and interment were held at McAlester by the Catholic officials. Dr. Troy at all times ranked as one of our ablest physicians and his life as a professional man and citizen was one of irreproachable character and integrity. His death is mourned by a host of friends attracted to him by knowledge of his worth over years of intimate contact.

Pittsburg County Medical Society adopted the following resolutions upon his death:

Whereas, death has removed from our midst Dr. E. H. Troy, a distinguished member of our profession, who for many years had labored diligently for the relief of the physical ills of the people of this community; and

Whereas, the deceased was not only well known as a physician and surgeon, but also as a promoter and supporter of many worthy civic activities;

Be it resolved by the Pittsburg County Medical Society:

That we realize that we have lost a member who was studious, conscientious, strong in his convictions and tireless in his efforts to relieve the afflictions of humanity; and

That we extend to his family, in this sad hour, our heart-felt sympathy; and

That we make the resolutions a part of the permanent records of this society, send a copy to his grief-stricken family, send copies to the local press and the Journal of the Oklahoma State Medical Association for publication.

Dr. J. A. Smith, Dr. A. J. Welch, Dr. T. H. McCarley.

#### DOCTOR JAMES M. VADEN

Dr. J. M. Vaden, Ada, died April 13th after a short illness from apoplexy. He has resided in Ada for 11 years, formerly practicing at Ardmore, which two were the only locations he ever made after graduation from Vanderbilt University in 1891.

Dr. Vaden was 59 years of age, born in Tennessee. He is survived by a wife and one son. Due to ill health he has not practiced for several years, but when active was a member of our Association as well as others. Funeral services were held in Ada after which the remains were removed to Ardmore for burial. A host of friends paid tribute to their former friend and his passing is sincerely mourned by them.



## NEW BOOKS

Under this heading books received by THE JOURNAL will be acknowledged. Publishers are advised that this shall constitute return for such publication as they may submit. Obviously all publications sent us cannot be given space for review, but from time to time books received, of possible interest to Oklahoma physicians, will be reviewed.

**Keen's Surgery Volume VII.** By Surgical Expert, Edited by W. W. Keen, M. D., L. L. D., Hon. F. R. C. S. Eng. and Edin., Emeritus Professor of the Principles of Surgery and Clinical Surgery, Jefferson Medical College, Philadelphia. Octavo of 855 pages, with 359 illustrations, 17 of them in colors Philadelphia and London: W. B. Saunders Company, 1921.

**Keen's Surgery Volume VIII.** By Surgical Experts. Edited by W. W. Keen, M. D., L. L. D., Hon. F. R. C. S., Eng. and Edin., Emeritus Professor of the Principles of Surgery and Clinical Surgery, Jefferson Medical College, Philadelphia. Octavo of 960 pages with 657 illustrations, 12 of them in colors. Philadelphia and London: W. B. Saunders Company, 1921. Price Volume VII and VIII and Desk Index Volume Cloth, \$25.00 net per set. Sold by subscription.

**The Principles of Therapeutics**, by Oliver T. Osborne, M. D., Professor of Therapeutics, Department of Medicine, Yale University. Octavo of 881 pages. Philadelphia and London: W. B. Saunders Company, 1921. Cloth \$7.00 net.

**Principles of Hygiene.** The New (7) Edition. **Principles of Hygiene: A Practical Manual for Students, Physicians, and Health-Officers.** By D. H. Bergey, M.D., Dr. P. H., Assistant Professor of Hygiene and Bacteriology, University of Pennsylvania. Seventh Edition, thoroughly revised. Octavo of 56 pages, illustrated. Philadelphia and London: W. B. Saunders Company, 1921. Cloth, \$5.50 net.

### STANDING COMMITTEES.\*

**Legislative.**—Drs. Hugh Scott, Chairman, 304 Oil Exchange Bldg.; A. K. West, Majestic Bldg., Oklahoma City; J. M. Byrum, Shawnee; G. A. Boyle, Enid; C. A. Thompson, Muskogee.

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**Tuberculosis, Study and Control.**—Drs. Leila Andrews, Chairman, Colcord Bldg., Oklahoma City; Horace T. Price, 303 Palace Bldg., Tulsa; C. W. Heitzman, 508 Barnes Bldg., Muskogee.

**Health Problems in Education.**—Drs. G. A. Wall, Chairman, 720 Mayo Bldg.; J. R. Burdick, Hotel Ketchum, Tulsa; A. S. Risser, Blackwell; J. T. Martin, 200 W 14th; Edw. F. Davis, 343 American National Bldg., Oklahoma City.

**Cancer, Study and Control.**—Drs. LeRoy Long, Chairman, Colcord Bldg., Oklahoma City; Gayfree Ellison, State University, Norman; McLain Rogers, Clinton.

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**Vision, Conservation.**—Drs. W. Albert Cook, Chairman, Palace Bldg., Tulsa; D. D. McHenry, Colcord Bldg., Oklahoma City.

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\*This list is published bi-monthly.

### OFFICERS OKLAHOMA STATE MEDICAL ASSOCIATION, 1921-1922.

President, Dr. G. A. Boyle, Enid (1921-1922)  
President-Elect, Dr. McLain Rogers, Clinton (1922-1923)  
First Vice President, Dr. J. A. Walker, Shawnee.  
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Associate Editor, Councilor Representative, Dr. C. W. Heitzman, 508 Barnes Bldg., Muskogee.  
Delegates to A. M. A. Dr. L. J. Moorman, Oklahoma City, (1922) Dr. J. M. Byrum, Shawnee, (1922-1923)  
Meeting Place, Oklahoma City, May 1923.

### CHAIRMEN OF SCIENTIFIC SECTIONS:

**General Medicine, Neurology, Pathology and Bacteriology;** Dr. T. H. McCarley, Chairman, McAlester.

**Genito-Urinary, Skin and Radiology;** Dr. M. M. Roland, Patterson Bldg., Oklahoma City, Chairman, Dr. Robt. S. Love, 830 American Nat. Bldg., Oklahoma City, Secretary.

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**Pediatrics and Obstetrics;**

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**District No. 1.** Texas, Beaver, Cimarron., Harper, Ellis, Woods, Woodward, Alfalfa, Major, Grant, Garfield, Noble and Kay. A. S. Risser, Blackwell. (Term expires 1924)

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**District No. 8.** Craig, Ottawa, Delaware, Maves, Wagoner, Cherokee, Adair, Okmulgee, Muskogee and McIntosh. C. W. Heitzman, Muskogee. (Term expires 1922).

### Mme. Curie's First American Contribution

The July issue of the *Medical Review of Reviews* will contain a lengthy original contribution by Mme. Curie entitled "The Radio Elements and Their Applications." It is, we believe, the first and only contribution which this noted scientist has made to an American publication and is extremely valuable. A copy of the July issue containing it will be sent gratis to any physician making the request.

Address the Medical Review of Reviews, 51 East 59th Street, New York.

**Helping the Council.** There are many physicians who, while figuratively patting the Council on Pharmacy and Chemistry on the back, do nothing to aid its efforts. On the other hand, there are men in the profession who give the Council active support. Such a man wrote to a pharmaceutical concern that he was receiving advertising concerning its products and suggested that until these products had been accepted by the Council, it was a waste of postage to send this. He explained that he depended entirely on the Council in such matters as these (Jour. A. M. A., Nov. 6, 1920, p. 1275).



# ROSTER OF MEMBERS OF COUNTY SOCIETIES, 1921

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Collins, B. F.	Claremore
Evans, S. R.	Stilwell
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Patton, Jos. A.	Stilwell
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Standifer, J. E.	Elk City
Steele, J. M.	Berlin
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Buchanan, M. W.	Watonga
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Griffin, W. F.	Watonga
Hamble, V. R.	Okeene
Holcombe, Geo. M.	Okeene

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Leisure, J. B.	Watonga
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Colwick, O. J.	Durant
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Green, C. J.	Durant
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Jackman, F. M.	Mead
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McCalib, D. C.	Utica
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Ricks, H. C.	Caddo
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Rushing, G. M.	Durant
Shuler, Jas. L.	Durant
Taliaferro, C. F.	Bennington
Toney, S. M.	Bokchito
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Butler, I. S.	Alfalfa
Campbell, George C.	Anadarko
Cantrell, J. H.	Carnegie
Childress, Jos. E.	Anadarko
Clark, I. R.	Carnegie
Coker, George B.	Cyril
Dinkler, F.	Et. Cobb
Dixon, W. L.	Cement
Downs, Edw. W.	Hinton
Edens, M. H.	Anadarko
Hawn, W. T.	Binger
Henke, J. J.	Hydro
Hobbs, A. F.	Hinton

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Johnston, R. E.	Bridgeport
Kerley, W. W.	Anadarko
Lane, C. W.	Okanogan, Washington
McClure, P. L.	Ft. Cohn
McMillan, C. B.	Gracemont
Myers, P. B.	Apache
Padberg, J. W.	Carnegie
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Rector, R. D.	Anadarko
Rogers, F. W.	Carnegie
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Sanders, P. L.	Bremerton, Washington
Smith, C. A.	Hinton
Taylor, A. H.	Anadarko
Willard, A. J.	Cyril
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Brown, H. C.	El Reno
Catto, W. B.	El Reno
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Hatchett, J. A.	El Reno
Herod, P. F.	El Reno
Lane, Thomas	El Reno
Lynde, L. W.	Okarche
Muzzy, W. J.	El Reno
Pearce, C. M.	Calumet
Phelps, Joseph T.	El Reno
Richardson, D. B.	Union
Riley, J. T.	El Reno
Runkle, R. E.	Oklahoma City
Sanger, S. S.	Yukon
Webb, Roy A.	Piedmont
Wolff, I. G.	Okarche

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Barker, E. R.	Healdton
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Bates, C. E.	Ardmore
Best, J. C.	Ardmore
Boadway, F. W.	Ardmore
Booth, T. S.	Ardmore
Cameron, J. H.	Healdton
Cates, Albert	Ardmore
Cowles, A. G.	Ardmore
Cox, J. L.	Ardmore
Denham, T. W.	Ardmore
DePorte, Seymour	Ardmore
Dowdy, Thos. W.	Wilson
Easterwood, A. Y.	Ardmore
Fox, U. R.	Ardmore
Gillespie, L. D.	Berwyn
Goodwin, G. E.	Ardmore
Hardy, Walter	Ardmore
Hathaway, W. G.	Lone Grove
Henry, Robert H.	Ardmore
Higgins, H. A.	Springer
Jackson, T. J.	Ardmore
Johnson, Carrol A.	New Wilson
Johnson, G. E.	Ardmore
Johnson, W. M.	Ardmore
McNees, J. C.	Ardmore
*McRae, J. P.	Coalgate
Merriott, W. A.	Brock
Pollock, John R.	Ardmore
Sain, W. C.	Ardmore
Shelton, J. W.	Ardmore
Taylor, Dow	Woodford

Von Keeler, F. P.	Ardmore
Ware, T. H.	New Wilson
Wilson, S. W.	Ardmore
*Deceased.	

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Baird, A. A.	Parkhill
Blake, W. G.	Talhequah
Bond, T. J.	Talhequah
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Medearis, P. H.	Talhequah
Mitchell, J. H.	Hulbert
Thompson, J. M.	Talhequah

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Chambliss, T. L.	Hugo
Clark, J. L.	Hugo
Gee, J. F.	Irvin
Gee, R. L.	Hugo
Hale, C. H.	Boswell
Harris, G. E.	Hugo
Henderson, Thomas	Ft. Towson
John, W. N.	Hugo
Johnson, E. A.	Hugo
Marsh, G. O.	Ft. Towson
Mason, W. S.	Hugo
McPherson, G. W.	Ft. Towson
McPherson, V. L.	Boswell
Moore, J. D.	Hugo
Oliver, W. D.	Boswell
Sanders, R. W.	Soper
Shull, R. J.	Hugo
Steward, C. A.	Grant
Swearington, C. H.	Hugo
White, H. H.	Hugo
Wolfe, Reed	Hugo
Yeagan, W. M.	Soper

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Clifton, G. M.	Norman
Day, J. L.	Norman
Ellison, Gayfree	Norman
Gahle, J. J.	Norman
Griffin, D. W.	Norman
Lambert, I. B.	Lexington
Lowther, R. D.	Norman
McClure, J. B.	Norman
McLaughlin, J. R.	Norman
Thacker, Roht. E.	Lexington
Wiley, G. W.	Norman
Williams, J. M.	Norman

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Brown, W. E.	Lehigh
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Cody, R. D.	Centrahomah
Conner, L. A.	Coalgate
Goben, H. G.	Lehigh
Hipes, J. J.	Coalgate
Logan, W. A.	Oklahoma City
Mohly, A. L.	Lehigh
Rushing, F. E.	Coalgate
Rutherford, H. T.	Clarita
Sadler, F. E.	Coalgate
Wallace, W. B.	Coalgate

## COMANCHE COUNTY

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Barber, G. S.	Lawton
Broshears, Jackson	Lawton
Chapman, J. J.	Lawton
Dunlap, P. G.	Lawton
Dunlap, E. B.	Lawton
Gipson, T. J.	Lawton
Gooch, E. S.	Lawton
Gooch, L. T.	Lawton
Hammond, F. W.	Lawton
Hood, J. R.	Indianapolis
Hues, C. P.	Lawton
Joice, C. W.	Fletcher
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Lutner, Thomas R.	Lawton
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Mason, W. J.	Lawton
Mead, W. B.	Lawton
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Herron, A. W.	Vinita
Marks, W. R.	Vinita
Mitchell, R. L.	Vinita
Neer, C. S.	Vinita
Pickens, E. A.	Grove
Pierce, Lincoln J.	Vinita
Roberts, D. C.	Ketchum
Staples, J. H. L.	Bluejacket
Strough, D. P.	Vinita
Walker, Chas. F.	Grove

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Blachly, L. S.	Drumwright
Bone, J. Wade	Sapulpa
Coffield, A. W.	Drumwright
Coppage, O. C.	Bristow
Coppage, O. S.	Depew
Croston, G. C.	Sapulpa
Driver, C. M.	Mounds
Ellis, G. H.	Oilton
Fry, Melvin	Slick
Gargill, J. E.	Shamrock
Garland, H. S.	Sapulpa
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Gregoir, J. A.	Drumwright
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Izgar, Leon	New York City
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Kahle, C. E.	Drumwright

King, Emery W.	Bristow
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Leatherock, R. E.	Drumwright
Lively, C. O.	Depew
Longmire, W. P.	Sapulpa
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Martin, W. A.	Sapulpa
Mattenlee, J. M.	Sapulpa
McCullum, C. L.	Sapulpa
Neal, Wm. J.	Drumwright
Phillips, J. W.	Oilton
Powell, G. N.	Drumwright
Price, J. T.	Shamrock
Reese, C. B.	Sapulpa
Reynolds, E. W.	Bristow
Reynolds, S. W.	Drumwright
Robinson, W. P.	Sapulpa
Sanger, Paul	Drumwright
Shrader, Chas. T.	Bristow
Schwab, B. C.	Sapulpa
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Smith, L. L.	Sapulpa
Snorgrass, W. F.	Bristow
Stafford, G. A.	Kiefer
Starr, O. W.	Drumwright
Stevens, J. C.	Drumwright
Sweeney Roy W.	Sapulpa
Taylor, Z. G.	Mounds
Weaver, E. R.	Shamrock
Wells, John M.	Sapulpa
Wetzel, George H.	Sapulpa
Williams, J. Clay	Slick
Wilson, J. C.	Sapulpa

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Comer, M. C.	Clinton
Frizzell, J. T.	Sulphur
Gordon, J. M.	Weatherford
Gore, V. M.	Clinton
Gossom, K. D.	Custer City
Jeter, A. J.	Clinton
Lamb, Ellis	Clinton
McBurney, C. H.	Clinton
Murray, P. G.	Thomas
Parker, O. H.	Custer City
Parker, W. W.	Thomas
Rogers, McLain	Clinton
Williams, J. J.	Weatherford
Wright, O. W.	Putnam

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Seba, W. E.	Leedy

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Bamber, Wm.	Arnett
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Kerr, K. M.	Gage
Newman, O. C.	Shattuck
Rollo, J. W.	Shattuck
White, C. T.	Shattuck

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Bitting, B. T.	End
Boyle, G. A.	End
Cotton, Lee W.	End



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Feild, Julian	Enid	Downey, D. S.	Chickasha
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Hinson, T. B.	Enid	Hanna, J. M.	Alex
Hudson, F. A.	Enid	Henning, A. E.	Tuttle
Johnson, R. F.	Enid	Hume, R. R.	Minco
Kelso, M. A.	Enid	Leeds, A. B.	Chickasha
Kendall, W. L.	Enid	Livermore, W. H.	Chickasha
Kiebler, W. G.	Enid	Marrs, S. O.	Chickasha
Looper, S. A.	Houston, Texas	Nunnery, A. W.	Chickasha
McKee, E. N.	Van Nuys, California	Renegar, J. T.	Tuttle
Mahoney, J. E.	Enid	Stinson, J. E.	Chickasha
Mayberry, S. N.	Enid	White, A. C.	Chickasha
McEvoy, S. H.	Enid	Winborn, L. H.	Tuttle
McInnes, A. I.	Enid		
Newell, W. B.	Enid		
Piper, A. S.	Enid		
Rhodes, W. H.	Enid		
Smithe, P. A.	Enid		
Stone, Roy D.	Covington		
Swank, J. R.	Enid		
Walker, John R.	Enid		
Wilkins, E. A.	Covington		
Wolff, E. J.	Waukomis		

## GARVIN COUNTY

Baker, R. L.	Wynnewood
Brannum, T. C.	Pauls Valley
Callaway, James R.	Pauls Valley
Callaway, John R.	Pauls Valley
Gaddy, Lewis	Stratford
Greening, W. P.	Pauls Valley
Gross, T. F.	Lindsey
Johnson, G. L.	Pauls Valley
Keever, A. P.	Lindsey
Lain, E. H.	Paoli
Lindsey, J. K.	Elmore City
Lindsey, N. H.	Pauls Valley
Markham, H. P.	Pauls Valley
Matheney, J. C.	Lindsey
Mitchell, C. P.	Lindsey
Moore, J. W.	Maysville
Morgan, J. B.	Foster
Morton, E. L.	Hennepin
Norvell, E. E.	Wynnewood
Pratt, C. M.	Pauls Valley
Ralston, B. W.	Lindsey
Robberson, M. E.	Wynnewood
Robinson, A. J.	Pauls Valley
Settles, W. E.	Wynnewood
Shannon, J. B.	Pauls Valley
Spangler, A. S.	Pauls Valley
Stephens, J. W.	Maysville
Sullivan, C. L.	Elmore City
Sullivan, E.	Oklahoma City
Thaggard, W. C.	Antioch
Tucker, W. J.	Lindsey
Wilson, H. P.	Wynnewood

## GRADY COUNTY

Amhrister, J. C.	Chickasha
Antle, H. C.	Chickasha
Barry, Wm. R.	Bradley
Bates, C. W.	Bailey
Baze, R. J.	Chickasha
Baze, W. J.	Chickasha
Bledsoe, Martha	Chickasha
Bonnell, W. L.	Chickasha
Boon, U. C.	Chickasha
Cook, W. H.	Chickasha
Cox, C. P.	Ninnekah

## GRANT COUNTY

Brake, Chas. A.	Medford
Hardy, I. V.	Medford
Saffold, B. W.	Gihhson
Watson, J. M.	Lamont

## GREER COUNTY

Austin, C. W.	Mangum
Border, G. F.	Mangum
Bray, G. T.	Reed
Cherry, G. P.	Mangum
Dodson, W. O.	Willow
Finley, H. W.	Vinson
Hollis, J. B.	Mangum
Jeter, O. R.	Brinkman
Lansden, J. B.	Granite
Mabry, E. W.	Mangum
McGregor, F. H.	Mangum
Meredith, J. S.	Duke
Neel, Ney	Mangum
Nunnery, T. J.	Granite
Pearson, L. E.	Mangum
Waters, G. A.	Granite
Willis, T. L.	Granite

## HARMON COUNTY

Collins, C. E.	Hollis
Hopkins, S. W.	Hollis
Husband, W. G.	Hollis
Hyde, X. Y.	Hollis
Jones, J. E.	Hollis
McFadden, J. S.	Hollis
Patrick, J. B.	Aleda
Pendergraft, R. L.	Hollis
Pendergraft, W. C.	Hollis
Ray, W. T.	Gould
Scarborough, J. W.	Gould
Street, O. J.	Lewis

## HASKELL COUNTY

Counteraman, R. M.	Stigler
Davis, John	Stigler
Billington, J. E.	Enterprise
Fannin, F. A.	Stigler
Hill, A. T.	Stigler
Johnson, E.	Kinta
Jones, O. H.	Kanima
Mayfield, T. B.	Norman
McDoniel, J. W.	Hoyt
Mitchell, S. E.	Stigler
Rumley, J. C.	Idamaha
Terrell, R. F.	Stigler
Turner, T. B.	Stigler
Van Matre, M.	Keota
Waltrip, J. R.	Kinta

## HUGHES COUNTY

Bentley, W. B.	Calvin
Combest, G. M.	Lamar
Felix, T. B.	Holdenville
Lowe, J. W.	Holdenville
McCary, D. Y.	Holdenville
Mitchell, P. E.	Wetumka
Scott, Hugh	Oklahoma City

Stricklin, H. M.	Tonkawa
Syfert, A. C.	Blackwell
Waggoner, F. F.	Tonkawa
Walker, I. D.	Blackwell
Werner, J. W.	Newkirk
Winter, John S.	Ponca City
Wood, V. A.	Blackwell
*Deceased.	

## JACKSON COUNTY

Abernathy, E. A.	Altus
Brown, R. F.	Hedrick
Buck, D. C.	Eldorado
Crow, E. S.	Olustee
Fox, Raymond H.	Altus
Garrett, D. L.	Altus
Hardin, T. H.	Elmer
Hix, J. B.	Altus
Lowe, J. T.	Blair
McConnell, L. H.	Altus
McCray, J. W.	Martha
Sanderson, W. E.	Altus
Spears, C. G.	Altus
Scults, J. S.	Olustee
Taylor, H. R.	Eldorado

## JEFFERSON COUNTY

Andreskowski, W. T.	Ryan
Ashinhurst, T. E.	Waurika
Browning, W. M.	Waurika
Collins, D. R.	Waurika
Cronfill, A. G.	Grady
Derr, J. I.	Waurika
Dossey, W. J.	Ringling
Edwards, F. M.	Ringling
Hutchison, M. L.	Ryan
Lewis, A. R.	Oklahoma City
Maupin, C. M.	Waurika
Stephens, J. M.	Hastings
Sutherland, L. B.	Ringling

## JOHNSTON COUNTY

Clark, Guy	Milburn
Looney, J. T.	Tishomingo

## KAY COUNTY

Arrendell, C. W.	Ponca City
Berry, Leo A.	Ponca City
Bishop, H. H.	Dilworth
Browne, H. S.	Ponca City
Chamberlin, B. H.	Ponca City
Gearheart, A. P.	Blackwell
Gibson, H. B.	Ponca City
Gowey, H. O.	Newkirk
Havens, A. R.	Blackwell
Hawkins, J. C.	Blackwell
Hazen, A. L.	Newkirk
Holland, A. W.	Newkirk
Leslie, W. M.	Blackwell
Lockwood, W. A.	Ponca City
Lowry, Allen	Blackwell
McClerkin, W. N.	Ponca City
*McComas, J. M.	Elk City
McCullough, S. S.	Braman
McElroy, Thos.	Ponca City
Miller, D. W.	Blackwell
Nieman, G. H.	Ponca City
Northcutt, C. F.	Ponca City
Orvis, E. J.	Blackwell
Risser, A. S.	Blackwell
Robertson, W. A. T.	Ponca City
Scheneck, H. C.	Newkirk

## KINGFISHER COUNTY

Cavett, E. R.	Loyal
Fisk, C. W.	Kingfisher
Gose, C. O.	Hennessey
Linder, E. J.	Omega
Meredith, A. O.	Kingfisher
Overstreet, J. A.	Kingfisher
Pendleton, Jno. W.	Kingfisher
Rector, Newton	Hennessey
Scott, Frank	Kingfisher
Townsend, Benj. F.	Hennessey
Vincent, I. H.	Dover
Warrick, J. D.	Cashion

## KIOWA COUNTY

Barkley, A.	Hobart
Bonham, J. M.	Hobart
Bradley, C. E.	Mountain View
Bryce, J. R.	Snyder
Dobson, A. T.	Hobart
Hamilton, J. T.	Snyder
Hathaway, A. H.	Mountain View
Hollis, J. E.	Altus
Land, J. A.	Lone Wolf
Martin, F. F.	Roosevelt
McIlwain, Wm.	Lone Wolf
Miles, E. P.	Hobart
Miller, W. W.	Gorebo
Muller, J. A.	Snyder
Ritter, J. M.	Roosevelt
Seibert, Paul	Cooperton
Winter, J. D.	Hobart

## LATIMER COUNTY

Byars, A. C.	Wilburton
Dalby, H. L.	Wilburton
Evins, E. L.	Wilburton
Henry, T. L.	Wilburton
Kilpatrick, G. A.	Wilburton
McArthur, J. F.	Wilburton
Rich, R. L.	Red Oak
Talley, I. C.	Red Oak

## LEFLORE COUNTY

Bevill, S. D.	Poteau
Billingsley, C. B.	Cowlington
Bolger, J. M.	Poteau
Booth, G. R.	LeFlore
Campbell, E. A.	Heavener
Campbell, N. W.	Poteau
Collins, E. L.	Panama
Dean, S. C.	Howe
Duff, W. M.	Braden
Fair, E. N.	Heavener
Fowler, J. D.	Heavener
Gilliam, W. C.	Spiro
Hardy, Harrell	Poteau
Hardy, J. J.	Poteau
Hunt, A. G.	Howe
Minor, R. W.	Williams
Mixon, A. M.	Spiro
Morrison, G. A.	Poteau
Plumlee, M.	Poteau

## LEFLORE COUNTY (Cont.)

Scott, E. E.	Bokoshe
Sheppard, R. M.	Talihina
Shippey, E. E.	Wister
Wear, J. B.	Poteau
Woodson, B. D.	Poteau
Wright, R. L.	Talihina

## LINCOLN COUNTY

Adams, J. W.	Chandler
Bisbee, W. G.	Chandler
Erwin, F. B.	Wellston
Erwin, P. F.	Wellston
Hannah, R. H.	Prague
Marshall, A. M.	Chandler
Morgan, C. M.	Chandler
Murray, Levi	Wellston
Nickell, U. E.	Davenport
Pendergraft, W. A.	Carney

## LOGAN COUNTY

Barker, C. B.	Guthrie
Barker, E. O.	Guthrie
Barker, Pauline	Guthrie
Childers, A. G. T.	Mulhall
Cotteral, C. F.	Guthrie
Hahn, L. A.	Guthrie
Honseworth, J. L.	Guthrie
Hill, C. B.	Guthrie
Larkin, H. W.	Guthrie
Melvin, J. L.	Guthrie
Miller, Wm. C.	Guthrie
Petty, C. S.	Guthrie
Ritzhaupt, L. H.	Guthrie
Robinson, F. T.	Guthrie
Shelton, J. P.	Crescent
Souter, J. E.	Guthrie
Stephens, D.	Guthrie
Trigg, F. E.	Guthrie
West, A. A.	Guthrie

## LOVE COUNTY

Autry, D.	Marietta
Martin, A. E.	Marietta

## McCLAIN COUNTY

Cochran, J. E.	Byars
Dawson, O. O.	Wayne
McCurdy, W. C.	Purcell
Nunnery, E. E.	Washington
Slover, B. W.	Blanchard
West, J. W.	Purcell

## McCURTAIN COUNTY

Barker, N. L.	Broken Bow
Baylis, E.	Idabel
Clarkson, A. W.	Valliant
Denison, C. A.	Idabel
Grayson, A. S.	Idabel
Hensley, H.	Golden
Hill, L. H.	Idabel
Huckaby, C. R.	Valliant
McBrayer, W. H.	Haworth
McCaskill, W. B.	Idabel
McDonald, C. T.	Broken Bow
McKay, R. D.	Broken Bow
Moreland, B. F.	Shultz
Moreland, J. T.	Idabel
Moreland, W. A.	Idabel
Mosely, F.	Valliant
Oliver, R. B.	Bokhoma
Sherrill, R. H.	Broken Bow

Taylor, W. D.	Haworth
Thompson, J. M.	Broken Bow
Walker, E. B.	Ida
Williams, R. D.	Idabel
Woods, N. D.	Millerton

## McINTOSH COUNTY

Bennett, Dyton	Texanna
Graves, G. W.	Hitchita
Jacobs, L. I.	Vivian
Lee, N. P.	Checotah
Little, D. E.	Eufaula
McCullough, A. J.	Checotah
Minor, S. W.	Boynton
Pope, A. J.	Hanna
Rushing, B. F.	Hanna
Shaumty, J. N.	Eufaula
Smith, F. L.	Fame
Tolleson, W. A.	Eufaula
Vance, B. J.	Checotah
Watkins, J. C.	Checotah
West, G. W.	Eufaula
Womack, W. F.	Checotah

## MAJOR COUNTY

Anderson, J. V.	Fairview
Johnson, B. F.	Fairview
Specht, Elsie L.	Fairview
*Taylor, W. J.	Fairview
*Deceased	

## MAYES COUNTY

Adams, J. L.	Pryor
Bryant, W. C.	Choteau
Hollinsworth, J. E.	Strang
Mitchell, J. L.	Pryor
Morrow, B. L.	Salina
Puckett, Carl	Pryor
Rogers, Ivadel	Pryor
Smith, F. W.	Picher
Tilly, Geo. W.	Locust Grove
White, L. C.	Adair
Whittaker, W. T.	Pryor

## MARSHALL COUNTY

Ballard, A. E.	Madill
Blaylock, T. A.	Madill
Belt, M. D.	Woodville
Collins, J. A.	Willis
Davis, W. Lee	Kingston
Ford, W. H.	Kingston
Gaston, J. I.	Madill
Haynie, W. D.	Kingston
Holland, J. L.	Madill
Lewis, E. F.	Kingston
Logan, J. H.	Lebanon
Rappolee, H. E.	Madill
Robinson, P. F.	Madill
Welborn, O. E.	Kingston
Winston, S. P.	MacMillan

## MURRAY COUNTY

Adams, J. A.	Sulphur
Bailey, H. C.	Sulphur
Brown, A. P.	Davis
Luster, J. C.	Davis
Ponder, A. V.	Sulphur
Powell, W. H.	Sulphur
Ryan, J. L.	Sulphur
Slover, G. W.	Sulphur
Slover, J. T.	Sulphur
Simmons, J. H.	Sulphur
Smith, W. A.	Davis



## MUSKOGEE COUNTY

Ballantine, H. T.	Muskogee
Berry, William D.	Muskogee
Blakemore, J. L.	Muskogee
Brown, Benjamin H.	Muskogee
Carloss, T. C.	Hoffman
Chatterjee, S. M.	Muskogee
DeGroot, C. E.	Muskogee
Dill, Emmett	Boynton
Donnell, R. N.	Muskogee
Dwight, K. M.	Muskogee
Earnest, A. N.	Muskogee
Everly, A. W.	Muskogee
Ewing, Finis W.	Muskogee
Farris, R. C.	Porum
Fite, F. B.	Muskogee
Fite, Pat.	Muskogee
Floyd, W. E.	Muskogee
Fryer, S. J.	Muskogee
Fullenwider, C. M.	Muskogee
Graves, J. R.	Boynton
Harris, A. W.	Muskogee
Harris, James G.	Muskogee
Hartgraves, Thos. A.	Muskogee
Hedrick, Ellen	Muskogee
Heitzman, Chas. W.	Muskogee
Hill, C. L.	Haskell
Holcombe, R. N.	Muskogee
Hollingsworth, J. I.	Muskogee
Hoss, Sessler	Muskogee
Howel, O. E.	Oktaha
Joblin, W. R.	Porter
Jones, R. E.	Braggs
Keith, Emma S.	Muskogee
King, F. S.	Muskogee
Klass, O. C.	Muskogee
Lee, John E.	Haskell
Lovell, A. J.	Delhart, Texas
Mitchell, P. S.	Inglewood, California
Morrow, Milton	Muskogee
Nagle, W. M.	Muskogee
Nesbitt, P. P.	Muskogee
Nichols, J. T.	Muskogee
Noble, J. G.	Boise, Idaho
Oldham, I. B.	Muskogee
Pearce, W. E.	Boynton
Plunkett, J. H.	Porum
Rafter, J. G.	Muskogee
Reynolds, John	Muskogee
Rice, C. V.	Muskogee
Rogers, H. C.	Muskogee
Sanford, J. Hoy	Muskogee
Scott, H. A.	Muskogee
Shackelford, T. T. Jr.	Haskell
Stewart, G. W.	Muskogee
Stocks, A. L.	Muskogee
Thompson, C. A.	Muskogee
Thompson, M. K.	Muskogee
Tilly, W. T.	Muskogee
Vitrum, Jas. S.	Muskogee
Warmack, J. C.	Muskogee
Watterfield, Floyd E.	Muskogee
White, J. H.	Muskogee
Wilkiemeyer, Fred J.	Muskogee

## NOWATA COUNTY

Allen, Robert	Nowata
Bagby, H. J.	Nowata
Berry, F. O.	Nowata
Brookshire, J. E.	Nowata
Collins, J. R.	Nowata
Collins, E. F.	Nowata
Dolson, F. R.	Nowata
Holland, J. C.	Grove
Lawson, D. M.	Nowata
Nairn, Wm.	Nowata

Strother, L. T.	Nowata
Sudderth, J. P.	Nowata
Thomas, J. G.	Alluwe
Waters, Geo. A.	Lenapah
Wilkinson, J. T.	Delaware

## OKFUSKEE COUNTY

Bloss, C. M.	Okemah
Bombarger, C. C.	Paden
Chambers, Albert M.	Weleetka
Davis, W. H.	Castle
Dovell, J. C.	Paden
Hillmeyer, F. E.	Weleetka
Jenkins, W. P.	Bearden
Kenedy, J. A.	Okemah
Keys, R.	Okemah
Lucus, A. C.	Castle
May, H. A.	Okemah
Nye, L. A.	Okemah
Pemberton, J. M.	Okemah
Preston, J. R.	Weleetka
Preston, T. R.	Weleetka
Rollins, J. S.	Paden
Stephenson, A. J.	Okemah
Watts, B.	Okemah

## OKLAHOMA COUNTY

Alford, J. M.	Oklahoma City
Allen, E. P.	Oklahoma City
Andrews, L. E.	Oklahoma City
Bailey, Wm. H.	Oklahoma City
Baird, A. B.	Oklahoma City
Balyeat, R. M.	Oklahoma City
Barker, C. E.	Oklahoma City
Berry, C. N.	Oklahoma City
Binkley, J. G.	Oklahoma City
Blesh, A. L.	Oklahoma City
Boggs, Nathen	Oklahoma City
Bolend, Rex	Oklahoma City
Bolend, Floyd F.	Oklahoma City
Bradley, H. C.	Oklahoma City
Brewer, T. W.	Oklahoma City
Buchanan, Thos. A.	Oklahoma City
Buxton, L. H.	Oklahoma City
Chase, A. B.	Oklahoma City
Clark, F. H.	Oklahoma City
Cloudman, H. H.	Oklahoma City
Clymer, Cyril E.	Oklahoma City
Coley, A. J.	Oklahoma City
Crawford, Paul H.	Oklahoma City
Cummings, W. C.	Oklahoma City
Cunningham, S. R.	Oklahoma City
Davenport, A. E.	Oklahoma City
Davis, Edward F.	Oklahoma City
Day, C. R.	Oklahoma City
DeMand, F. A.	Oklahoma City
Dicken, W. E.	Oklahoma City
Dersch, W. H.	Oklahoma City
Dixon, W. E.	Oklahoma City
Early, R. O.	Oklahoma City
Earnheart, E. G.	Oklahoma City
Edwards, R. T.	Oklahoma City
Ferguson, E. S.	Oklahoma City
Fishman, C. J.	Oklahoma City
Flesher, Thomas	Edmond
Fowler, W. A.	Oklahoma City
Frierson, S. E.	Oklahoma City
Fulton, F. F.	Oklahoma City
Fulton, Geo.	Oklahoma City
Garrison, George I.	Oklahoma City
Gav, Ruth A.	Oklahoma City
Guthrie, A. L.	Oklahoma City
Haas, K.	Harrah
Hinchee, G. W.	Oklahoma City
Harbison, J. E.	Oklahoma City

## OKLAHOMA COUNTY—Continued

Hartford, J. S.	Oklahoma City	Townsend, Cary W.	Oklahoma City
Haskett, Paul E.	Oklahoma City	Underwood, E. L.	Oklahoma City
Heatley, J. E.	Oklahoma City	Wallace, W. J.	Oklahoma City
Henry, J. W.	Oklahoma City	Wedel, Curt von	Oklahoma City
Hirshfield, A. C.	Oklahoma City	West, A. K.	Oklahoma City
Holliday, J. R.	Oklahoma City	West, Willis K.	Oklahoma City
Howard, R. M.	Oklahoma City	Wallace, W. J.	Oklahoma City
Hubbard, J. C.	Christobal, Canal Zone	Weir, Marshall W.	Oklahoma City
Jones, E. L.	Oklahoma City	Wells, Eva	Oklahoma City
Jolly, W. J.	Oklahoma City	Wells, W. W.	Oklahoma City
Kelly, John F.	Oklahoma City	Westfall, L. M.	Oklahoma City
Kernodle, S. E.	Oklahoma City	White, Arthur W.	Oklahoma City
Kuhn, J. F.	Oklahoma City	Will, A. A.	Oklahoma City
Lain, E. S.	Oklahoma City	Williams, C. W.	Oklahoma City
LaMotte, G. A.	Oklahoma City	Williams, H. M.	Oklahoma City
Langaford, Wm.	Oklahoma City	Wilson, K. J.	Oklahoma City
Langston, Wann	Oklahoma City	Young, Antonio D.	Oklahoma City
Lawson, N. E.	Oklahoma City		
Lee, Clarence E.	Oklahoma City		
Lehmer, Elizabeth	Oklahoma City		
Lewis, E. M.	Oklahoma City		
Lipscomb, W. P.	Oklahoma City		
Long, LeRoy	Oklahoma City		
Long, Ross D.	Oklahoma City		
Longmire, T. R.	Oklahoma City		
Looney, R. E.	Oklahoma City		
Love, R. S.	Oklahoma City		
Lowry, Dick	Oklahoma City		
Lowry, Tom	Oklahoma City		
Martin, J. T.	Oklahoma City		
Maxwell, J. H.	Oklahoma City		
McBride, Earl D.	Oklahoma City		
McCabe, R. S.	Oklahoma City		
McDonald, J. C.	Oklahoma City		
McHenry, D. D.	Oklahoma City		
*McNair, O. P.	Oklahoma City		
Messenbaugh, J. C.	Oklahoma City		
Miles, W. H.	Oklahoma City		
Moorman, L. J.	Oklahoma City		
Mraz, J. Z.	Oklahoma City		
Murdock, R. L.	Oklahoma City		
Newman, M. H.	Oklahoma City		
Newton, L. A.	Oklahoma City		
Nowlin, N. R.	Oklahoma City		
Paulus, David D.	Oklahoma City		
Phelan, J. R.	Oklahoma City		
Pine, John S.	Oklahoma City		
Postelle, J. M.	Oklahoma City		
Reck, J. A.	Oklahoma City		
Reed, Horace	Oklahoma City		
Riely, Lea A.	Oklahoma City		
Riley, J. W.	Oklahoma City		
Roddy, John A.	Oklahoma City		
Roland, M. M.	Oklahoma City		
Rolater, J. B.	Oklahoma City		
Rucks, W. W.	Oklahoma City		
Sackett, L. M.	Oklahoma City		
Salmon, W. T.	Oklahoma City		
Salomon, A. L.	Oklahoma City		
Sands, A. J.	Oklahoma City		
Sanger, F. M.	Oklahoma City		
Sanger, W. M.	Oklahoma City		
Shaw, R. M.	Oklahoma City		
Sheets, Fred C.	Oklahoma City		
Shultz, W. G.	Oklahoma City		
Smith, Millington	Oklahoma City		
Starry, L. J.	Oklahoma City		
Stone, S. H.	Edmond		
Stout, M. E.	Oklahoma City		
Strader, S. L.	Oklahoma City		
Strother, S. P.	Oklahoma City		
Sullivan, E. S.	Oklahoma City		
Tabor, G. R.	Oklahoma City		
Taylor, W. M.	Oklahoma City		
Taylor, C. B.	Oklahoma City		
Todd, H. C.	Oklahoma City		

## OKMULGEE COUNTY

Alexander, Linn	Okmulgee
Alexander, Robert L.	Bryant
Adams, A. C.	Kusa
Bercaw, J. E.	Okmulgee
Bollinger, I. W.	Henryetta
Boswell, H. D.	Henryetta
Breese, Harry E.	Henryetta
Brymer, W. G.	San Antonio, Texas
Burrow, O. S.	Okmulgee
Byram, E. C.	Okmulgee
Carnell, M. D.	Okmulgee
Coleman, Alfred W.	Dewar
Conn, L. D.	Morris
Cooley, Wm. H.	Okmulgee
Cott, Wm. M.	Okmulgee
Culp, A. H.	Beggs
Dawson, W. D.	Henryetta
Edwards, J. G.	Okmulgee
Etter, Forest B.	Beggs
Ferguson, James B.	Okmulgee
Fondren, G. B.	Okmulgee
Griiffith, Wm.	Henryetta
Hammond, O. O.	Okmulgee
Hicks, Casper B.	Wetumka
Hicks, Fred S.	Wetumka
Hole, B. W.	Okmulgee
Hollingsworth, F. H.	Okmulgee
Holmes, A. R.	Henryetta
Horine, Wm. M.	Henryetta
Howell, Franklin D.	Okmulgee
Hughey, A. G.	Dewar
Hume, W. M.	Henryetta
Lynch, Thos.	Okmulgee
McKinney, G. Y.	Henryetta
Milroy, Joe A.	Okmulgee
Miner, J. L.	Beggs
Ming, C. M.	Okmulgee
Mitchener, W. C.	Okmulgee
Mooney, Richard	Henryetta
Myers, E. C.	Okmulgee
Neal, Jas. H.	Beggs
Nelson, F. L.	Okmulgee
Nelson, J. P.	Coalton
Olipphant, J. A.	Preston
Patterson, Geo. W.	Okmulgee
Pigg, W. B.	Okmulgee
Powell, J. H.	Okmulgee
Randel, H. O.	Okmulgee
Randle, D. M.	Okmulgee
Randel, B. W.	Okmulgee
Robertson, Ira W.	Henryetta
Robinson, J. C.	Henryetta
Rodda, Edward D.	Okmulgee
Riley, J. Lee	Henryetta
Sanderson, W. C.	Henryetta
Shelton, T. H.	Okmulgee

## OKMULGEE COUNTY (Cont.)

Simpson, N. N.	Henryetta
Spence, W. P.	Okmulgee
Stephenson, W. L.	Henryetta
Tabor, George E.	Morris
Torrance, L. B.	Okmulgee
Vernon, Wm. C.	Okmulgee
Wallace, V.	Morris
Watson, Fred S.	Okmulgee
Westover, R. L.	Okmulgee
Whittle, Chas. C.	Henryetta

## OSAGE COUNTY

Aaron, W. H.	Pawhuska
Berry, T. M.	Hominy
Colley, T. J.	Hominy
Chase, W. W.	Bigheart
First, F. R.	Bigheart
Fraley, J. J.	Hominy
Goss, G. W.	Pawhuska
Govan, Thos. P.	Pawhuska
Guild, C. H.	Osage
Hooper, E. W.	Pawhuska
Jones, Fred F.	Pawhuska
Langworthy, Geo. L.	Pawhuska
Logan, C. K.	Hominy
Morse, I. C.	Pershing
Neale, Q. B.	Pawhuska
Shoun, D. A.	Fairfax
Shoun, J. G.	Fairfax
Skinner, Benjamin	Pawhuska
Smith, C. C.	Pawhuska
Stanbro, G. E.	Pawhuska
Summer, H. L.	Osage
Walker, Roscoe	Pawhuska
Williams, L. C.	Pawhuska
Worten, Divonis	Pawhuska

## OTTAWA COUNTY

Barham, J. H.	Cardin
Bewley, J. D.	Miami
Bradshaw, J. O.	Welch
Cannon, R. F.	Miami
Cornwell, N. L.	Miami
Colvert, George W.	Miami
Clark, W. J.	Wyandotte
Connell, D. L.	Picher
Cooter, A. M.	Miami
Dawson, J. R.	Afton
DeArman, M. M.	Miami
DeFar, G. A.	Miami
Dodson, T. J.	Picher
Dolen, W. M.	Picher
Garlington, E. F.	Cardin
Haughton, J. B.	Commerce
Harper, R. H.	Afton
Jacobs, J. C.	Miami
Leisure, E. A.	Afton
Leslie, J. F.	Bernice
Lighfoot, J. B.	Miami
McCollum, Charles	Quapaw
McLelland, C. A.	Miami
McNaughton, G. P.	Miami
Miller, H. K.	Fairland
Phillips, L.	Picher
Pinnell, General	Miami
Sibley, W. A.	Cardin
Smith, Ira	Commerce
Smith, W. B.	Fairland
Taylor, G. W.	Cardin
Trouitt, L. W.	Afton
Webb, G. O.	Cardin
Whorton, J. T.	Miami
Willis, M. P.	Commerce
Wilkes, F. M.	Bixby

## PAWNEE COUNTY

Ballaine, C. W.	Cleveland
Dyer, J. P.	Jennings
Fleming, J. R.	Keystone
Gastineau, F. T.	Pawnee
Herrington, D. J.	Terlton
Marlow, J. C.	Blackburn
McDonald, C. R.	Jennings
McFarland, H. B.	Cleveland
Phillips, G. H.	Pawnee
Roberts, J. A.	Cleveland
Robinson, E. T.	Cleveland
Thompson, E. M.	Cleveland

## PAYNE COUNTY

Beach, C. H.	Glencoe
Briggs, I. A.	Stillwater
Cash, J. H.	Stillwater
Casky, C. R.	Yale
Davidson, W. N.	Cushing
Davis, Benj.	Cushing
Harris, E. M.	Cushing
Holbrooke, R. W.	Perkins
Hough, J. Walter	Cushing
Hudson, W. B.	Yale
Hughes, Eli	Stillwater
Janeway, D. F.	Stillwater
Jansing, J. H.	Cushing
Manning, H. C.	Cushing
Martin, J. A.	Cushing
Murphy, J. B.	Stillwater
Newell, E. G.	Yale
Proffitt, J. H.	Yale
Printiss, H. M.	Yale
Richardson, P. M.	Cushing
Sexton, C. E.	Stillwater
Simmons, C. D.	Stillwater
Weller, Ralph E.	Electra, Texas

## PITTSBURG COUNTY

Allen, E. N.	McAlester
Barton, V. H.	McAlester
Baum, F. J.	McAlester
Billington, J. J.	Quinton
Bright, J. B.	Kiowa
Browning, R. L.	Hartshorne
Brunson, C. J.	McAlester
Bunn, A. D.	Savanna
Bussey, H. N.	Pittsburg
Carlock, A. E.	Hartshorne
Chapman, T. S.	McAlester
Daniels, W. A.	North McAlester
Davis, J. E.	McAlester
Echols, J. W.	McAlester
Gardner, P.	Haileyville
Gee, L. E.	Adamson
Graves, W. C.	McAlester
Gray, J. W.	Quinton
Griffith, A.	McAlester
Grubbs, J. O.	North McAlester
Hailey, W. P.	Haileyville
Harris, A. J.	McAlester
Harris, Charles T.	Kiowa
Harris, J. M.	Kiowa
Hooper, W. F.	Wetumpka
Hornsby, W. W.	Haileyville
Hudson, W. K.	Gowan
Irwin, J. O.	Ashland
Johnston, J. C.	McAlester
Kilpatrick, G. A.	McAlester
Kuykendall, L. C.	McAlester
Lewallen, W. P.	Canadian
Loy, C. F.	McAlester



## PITTSBURG COUNTY (Cont.)

McClenden, J. W.	McAlester	Hurlbut, E. F.	Meeker
Miller, F. A.	Hartshorne	Kaylor, R. C.	McLoud
Munn, J. A.	McAlester	Marshall, J. W.	Shawnee
Moore, W. L.	Blanco	Martin, W. S.	Asher
Munn, R. A.	Kiowa	McFarling, A. C.	Shawnee
Norris, T. T.	Crowder	Owen, A. H.	Meeker
Palmer, Clara F.	North McAlester	Phillips, W. D.	Maud
Parks, J. F.	McAlester	Points, Blair	Shawnee
Pemberton, R. K.	McAlester	Reeder, H. M.	Shawnee
Ramsay, W. C.	Poteau	Rice, E. E.	Shawnee
Rice, O. W.	Alderson	Rowland, T. D.	Shawnee
Sames, W. W.	Hartshorne	Rowland, Edward A.	Long Island, New York
Schlicht, J. C.	North McAlester	Sanders, T. C.	Shawnee
Shankle, H. D.	Hartshorne	Scott, J. H.	Shawnee
Smith, J. A.	McAlester	Stooksbury, J. M.	Shawnee
Street, Graham	McAlester	Turner, J. H.	Shawnee
Turner, G. S.	Krebs	Wagner, H. A.	Shawnee
Wait, W. C.	McAlester	Walker, J. A.	Shawnee
Watson, F. L.	McAlester	Walker, J. E.	Shawnee
Welch, A. J.	McAlester	Warhurst, M. A.	Seminole
Williams, C. O.	McAlester	Williams, A. J.	McLoud
Willour, L. S.	McAlester	Wilson, H. H.	Shawnee
Wilson, McClellan	McAlester	Yeakel, E. L.	Shawnee

## PONTOTOC COUNTY

Boyce, W. E.	Ada	Ball, Ernest	Antlers
Breckenridge, N. B.	Merida, Yucatan, Mexico	Burnett, J. A.	Crum Creek
Breco, J. G.	Ada	Guinn, Edward	Antlers
Brydia, Catherine	Ada	Huckabay, B. M.	Tuskahoma
Burns, S. L.	Maxwell	Johnson, H. C.	Antlers
Castleberry, R. T.	Ada	Lawson, J. S.	Clayton
Cummings, I. L.	Ada	Patterson, E. S.	Antlers
Craig, J. R.	Ada	Robinett, Geo.	Albion
Dawson, B. B.	Ada		
Deen, J. A.	Ada		
Faust, W. D.	Ada		
Fuller, T.	Stonewall		
Hill, T. A.	Roff		
Lewis, M. L.	Ada		
Monasco, J. T.	Stonewall		
McKeel, Sam A.	Ada		
McNew, M. C.	Ada		
Mcderith, H. D.	Ada		
Miller, J. S.	Stonewall		
Overton, L. M.	Roff		
Richie, S. M.	Francis		
Ross, S. P.	Ada		
Sturdevant, F. S.	Vanass		
Sullivan, B. F.	Ada		
Webster, M. M.	Ada		

## POTTAWATOMIE COUNTY

Anderson, R. M.	Shawnee		
Appelwhite, G. H.	Shawnee		
Baker, M. A.	Shawnee		
Ball, W. A.	Wanette		
Baxter, G. S.	Shawnee		
Bradford, W. C.	Shawnee		
Brown, R. A.	Prague		
Butler, W. R.	Maud		
Byrum, J. M.	Shawnee		
Calhoun, Z. T.	McComb		
Campbell, H. G.	Asher		
Carson, F. L.	Shawnee		
Connally, G. R.	Romulus		
Cordell, U. S.	McComb		
Cullom, J. E.	Tecumseh		
Ewell, J. A.	Shawnee		
Fortson, J. L.	Tecumseh		
Gallaher, W. M.	Shawnee		
George, L. J.	Sruart		
Goodrich, E. E.	Shawnee		
Gray, E. J.	Tecumseh		
Hughes, J. E.	Shawnee		

## PUSHMATAHA COUNTY

Ball, Ernest	Antlers
Burnett, J. A.	Crum Creek
Guinn, Edward	Antlers
Huckabay, B. M.	Tuskahoma
Johnson, H. C.	Antlers
Lawson, J. S.	Clayton
Patterson, E. S.	Antlers
Robinett, Geo.	Albion

## ROGER MILLS COUNTY

Ballenger, B. M.	Strong City
Cary, W. S.	Rankin
Dorroh, Lee	Hammon
Wallace, Geo. H.	Cheyenne

## ROGERS COUNTY

Anderson, F. A.	Claremore
Arnold, A. M.	Claremore
Bassmann, Caroline	Claremore
Beson, C. W.	Claremore
Bushyhead J. C.	Claremore
Haley, J. H.	Vinita
Hays, W. F.	Claremore
Henley, L. H.	Claremore
Howard, W. A.	Chelsea
Means, J. F.	Claremore
Meloy, R. C.	Foyil
Mills, W. P.	Claremore
Roberts, T. R.	Catoosa
Smith, J. C.	Catoosa
Stemmons, J. M.	Oologah
Strickland, George	Claremore
Taylor, J. C.	Chelsea
Waldrop, J. G.	Claremore
Young, B. O.	Talala

## SEMINOLE COUNTY

Black, W. R.	Seminole
Harber, J. N.	Seminole
Harrison, T. F.	Wewoka
Huddleston, W. T.	Konawa
Knight, W. L.	Wewoka
Long, W. J.	Konawa
McAlester, E. R.	Seminole
Perkins, J. H.	Wewoka
Turlington, M. M.	Seminole
Wright, P. E.	Sasakwa

## SEQUOYAH COUNTY

Breedlove, J. C.	Muldrow
Bryan, Cecil	Vian
Cheek, J. A.	Sallisaw
Collins, T. W.	Muldrow
Greene, E. P.	Sallisaw
Hicks, A. A.	Muldrow
Hudson, V. W.	Sallisaw
Jones, S. B.	Sallisaw
Morrow, J. A.	Sallisaw
Morris, C. H.	Checotah
Sosbee, J. W.	Gore
Wood, T. F.	Sallisaw

## STEPHENS COUNTY

Bartley, J. P.	Duncan
Brewer, J. R.	Doyle
Carmichael, J. B.	Duncan
Chumley, C. P.	Loco
Conger, H. A.	Duncan
Cowman, J. P.	Comanche
Decker, M. F.	Comanche
DeMeglio, Edward	Oklahoma City
Frie, H. C.	Duncan
Garrett, S. S.	Loco
Haraway, P. M.	Marlow
Harrison, C. M.	Comanche
Ivy, W. S.	Duncan
Long, D. D.	Oklahoma City
Mavity, A. R.	Marlow
Montgomery, D. M.	Marlow
Mullins, J. Arthur	Marlow
Neiweg, J. W.	Duncan
Pate, J. D.	Duncan
Plunkett, B. J.	Duncan
Rice, S. A.	Alma
Richards, C. C.	Marlow
Taylor, J. I.	Healdton
Thomasson, E. B.	Duncan
Weedn, A. J.	Duncan
Wharton, J. O.	Duncan
Williamson, S. H.	Duncan

## TEXAS COUNTY

Akers, Wm. W. D.	Hooker
Hayes, R. B.	Guymon
Langston, Wm. H.	Guymon
Lee, Daniel S.	Guymon
McMillin, Jas. M.	Goodwell
Risen, W. J.	Hooker

## TILLMAN COUNTY

Allen, C. C.	Grandfield
Arrington, J. E.	Frederick
Bacon, O. G.	Frederick
Collier, J. W.	Tipton
Comp, G. A.	Manitou
Foshee, W. C.	Grandfield
Fuqua, W. A.	Grandfield
Gillis, J. A.	Frederick
Hays, A. J.	Frederick
Howell, C. A.	Oklahoma City
MacKellar, M. M.	Lowland
Mitchell, L. A.	Frederick
Osborn, J. D., Jr.	Frederick
Priestley, F. G.	Frederick
Reynolds, J. C.	Frederick
Roberts, H. L.	Frederick
Spurgeon, T. F.	Frederick
Wilson, R. E.	Davidson
Wright, Harper	Grandfield

## TULSA COUNTY

Allison, T. P.	Sand Springs
Allison, Ira	Tulsa
Ament, C. M.	Tulsa
Anders, Walter L.	Tulsa
Archley, R. Q.	Tulsa
Atherton, L.	Tulsa
Atkins, Paul N.	Tulsa
Ball, C. H.	Tulsa
Bass, E. Y.	Tulsa
Beard, D. A.	Tulsa
Beesley, W. W.	Tulsa
Beyer, J. Walter	Tulsa
Boso, F. M.	Tulsa
Bowers, Jos. S.	Red Fork
Browne, H. S.	Tulsa
Brown, J. Winter	Tulsa
Buchanan, Jas. M.	Tulsa
Burdick, J. R.	Tulsa
Butcher, J. P.	Tulsa
Calhoun, C. E.	Sand Springs
Callahan, Hubert W.	Tulsa
Cannon, James M.	Tulsa
Capps, J. F.	Tulsa
Carlton, L. H.	Tulsa
Charbonnet, P. N.	Tulsa
Childs, H. C.	Tulsa
Childs, J. W.	Tulsa
Clinton, Fred S.	Tulsa
Clulow, Geo. H.	Tulsa
Cohenour, E. L.	Tulsa
Cook, W. Albert	Tulsa
Coulter, T. B.	Tulsa
Cronk, Fred Y.	Tulsa
Daves, Albert C.	Tulsa
Davis, B. J.	Sand Springs
Davis, G. M.	Bixby
Dean, W. A.	Tulsa
Dillon, C. A.	Tulsa
Douglas, R. A.	Tulsa
Dunlap, R. W.	Tulsa
Dutton, W. F.	Tulsa
Dwyer, Jas. E.	Tulsa
Ellard, C. E.	Bixby
Emerson, A. V.	Tulsa
Evans, George Clinton	Tulsa
Felt, R. A.	Tulsa
Flannigan, O. A.	Tulsa
Flinn, Geo. W.	Tulsa
Ford, Herman W.	Tulsa
Franklin, Onis	Broken Arrow
Garabedian, G.	Tulsa
Geissler, Paul	Tulsa
Gilbert, J. B.	Tulsa
Glass, Fred	Tulsa
Goodman, Samuel	Tulsa
Gorrell, J. F.	Tulsa
Grosshart, Ross	Tulsa
Gwin, H. B.	Tulsa
Halm, C. J.	Sand Springs
Halm, Frederic S.	Sand Springs
Haralson, Chas. H.	Tulsa
Harris, Bunn	Jenks
Hartshorn, G. E.	Tulsa
Haskins, Thos. M.	Tulsa
Hawley, S. DeZell	Tulsa
Hayden, E. Forrest	Tulsa
Hendershott, C. T.	Tulsa
Henderson, F. W.	Tulsa
Hickey, Chas. M.	Tulsa
Hille, H. L.	Collinsville
Hooper, J. S.	Tulsa
Houser, M. A.	Tulsa
Hutchinson, A.	Bixby
Hughes, Lawson	Collinsville
Jackson, L. I.	Tulsa
Johnson, Chas. D.	Tulsa
Justice, H. B.	Tulsa

## TULSA COUNTY (Cont.)

Kimball, M. C.	Tulsa
Laws, J. H.	Broken Arrow
Lee, John W.	Tulsa
Lemmon, W. G.	Tulsa
Lhevine, Morris B.	Tulsa
Linn, C. P.	Tulsa
Lynn, R. S.	Tulsa
Mangan, P. A.	Tulsa
Margolin, Berthe	Tulsa
Mayginnis, N. W.	Tulsa
Mayginnis, P. H.	Tulsa
McAnally, W. F.	Tulsa
McCarty, C. W.	Tulsa
McLean, B. W.	Jenks
Mohrman, S. S.	Tulsa
Morgan, J. H.	Tulsa
Murdock, H. D.	Tulsa
Murray, S.	Tulsa
Myers, F. C.	Tulsa
Nabham, J. J.	Tulsa
Oden, B. N.	Tulsa
O'Hern, C. F. D.	Tulsa
Osborn, George R.	Tulsa
Penny, T. A.	Tulsa
Perry, J. T.	Tulsa
Perry, M. L.	Tulsa
Phillips, W. G.	Skiatook
Pigford, A. W.	Tulsa
Presson, L. C.	Tulsa
Price, H. P.	Tulsa
Price, Horace T.	Tulsa
Reeder, C. L.	Tulsa
Rhodes, R. E. L.	Tulsa
Robertson, C. L.	Broken Arrow
Rogers, J. W.	Tulsa
Rogers, W. H.	Tulsa
Roth, A. W.	Tulsa
Roy, Emil	Tulsa
Schoenloeber, A. W.	New York City
Shearin, L. R.	Tulsa
Sherwood, R. W.	Tulsa
Smith, R. V.	Tulsa
Smith, Ruric N.	Tulsa
Smith, R. R.	Tulsa
Smith, W. E.	Collinsville
Springer, M. P.	Tulsa
Stallings, T. W.	Tulsa
Stuart, Leon	Tulsa
Summers, C. S.	Tulsa
Trainor, W. J.	Tulsa
Tucker, I. N.	Tulsa
Vaughn, C. M.	Tulsa
Wagoner, R. S.	Tulsa
Wainright, A. G.	Tulsa
Wall, G. A.	Tulsa
Wallace, J. E.	Tulsa
Ward, H. P.	Leonard
Washington, L. G.	Tulsa
Watkins, Frank L.	Tulsa
Webb, J. E.	Tulsa
White, Daniel W.	Tulsa
White, Peter Cope	Tulsa
Wiley, A. Ray	Tulsa
Wiley, C. Z.	Tulsa
Wilson, Edwin B.	Tulsa
Wood, Charles	Tulsa

## WAGONER COUNTY

Brewer, A. J.	Coweta
Cobb, Isabel	Wagoner
Gorden, Geo. R.	Wagoner
Jobe, G. W.	Wagoner
Moore, G. L.	Wagoner
Orvis, G. S.	Wagoner
Rutherford, S. C.	Wagoner
Shinn, T. J.	Wagoner

## WASHINGTON COUNTY

Athey, J. V.	Bartlesville
Barnes, L. B.	Bartlesville
Bradfield, S. J.	Bartlesville
Chamberlin, E. M.	Bartlesville
Crawford, H. G.	Dewey
Crawford, T. O.	Dewey
Dorsheimer, Geo. V.	Dewey
Dunn, J. C.	Bartlesville
Green, O. I.	Bartlesville
Gunter, J. I.	Ochelata
Hudson, C. D.	Dewey
Hudson, J. O.	Bartlesville
Kingman, Wm. H.	Bartlesville
Kiser, J. D.	Bartlesville
Lynott, W. A.	Bartlesville
Miller, Ned	Bartlesville
North, Arthur	Bartlesville
Parks, S. M.	Olathe, Kansas
Rammel, W. E.	Bartlesville
Ray, M. E.	Bartlesville
Shipman, W. H.	Bartlesville
Smith, J. G.	Riverside, California
Sommerville, O. S.	Bartlesville
Staver, B. F.	Bartlesville
Sutton, F. R.	Bartlesville
Torrey, John Paine	Bartlesville
Weber, H. C.	Bartlesville
Wells, J. C.	Bartlesville
Woodring, G. F.	Bartlesville
Wyatt, M. C.	Bartlesville

## WASHITA COUNTY

Baker, B. W.	Cloud Chief
Bennett, D. W.	Sentinel
Bungardt, A. H.	Cordell
Dillon, G. A.	Dill City
Farber, J. E.	Cordell
Freeman, I. S.	Rocky
Harmes, J. H.	Cordell
Kerley, J. W.	Cordell
Neal, A. S.	Cordell
Sherburne, A. M.	Cordell
Stephens, E. F.	Foss
Stoll, A. A.	Foss
Tidball, W. M.	Sentinel
Tracy, C. M.	Sentinel
*Witt, W. J.	Colony
*Deceased.	

## WOODS COUNTY

Ames, Howard B.	Alva
Bilby, George Newton	Alva
Bowling, James A.	Alva
Cherry, Walter S.	Alva
Clapper, Ebenezer P.	Waynoka
Ensor, D. Boy	Hopeton
Grantham, Elizabeth	Alva
Gregg, Orion R.	Wilson
Hale, Arthur E.	Alva
Hunt, Isaac C.	Freedom
Ingraham, Mason K.	Waynoka
Moore, Burt, A.	Strafford, Missouri
Moore, C. K.	Waynoka
Munsell, L. S.	Beaver
Simon, William Ebert	Alva
Templin, O. E.	Alva
Welch, Sylvester H.	Dacoma
Wilson, Ennis C.	Alva

## WOODWARD COUNTY

Bagby, E. L.	Supply
Barber, J. J.	Laverne
Brace, A. J.	Vici
Cockrell, H. S.	Mooreland



## WOODWARD COUNTY (Cont.)

Davis, C. E.	Woodward
Dixon, T. E.	Mooreland
Doler, C. A.	Supply
Duncan, J. C.	Forgan
Forney, C. J.	Woodward
Green, John W.	Mutual
Hawkins, R. H.	Quinlan
Houser, C. E.	Vici
Leachman, T. C.	Woodward
Miller, E. M.	Buffalo
Newport, E. W.	Seiling
Patterson, F. L.	Woodward
Patterson, J. L.	Woodward
Pierson, O. A.	Woodward
Rogers, C. L.	Knowles
Rose, W. L.	Woodward
Stetcher, H. E.	Supply
Stultz, P. H.	Supply
Tedrowe, C. W.	Woodward
Triplett, T. B.	Mooreland
Walker, Hardin	Rosston
Watts, D. D.	Laverne
Workman, J. M.	Woodward
Workman, R. A.	Woodward

**Vaccines in Toxic Conditions.** Under this title an article purporting to be a scientific contribution appears in the original department of the Illinois Medical Journal. The apparent purpose of the article is to overcome any hesitancy on the part of practitioners to use vaccines in toxic infectious conditions for fear that they might thereby cause harm. The theory propounded is contrary to those who have studied the subject. The man who writes the article, G. H. Sherman, is in the business of making and selling vaccines, though this is not made evident in the article (Jour. A. M. A., Oct. 23, 1920, p. 1140).

**More Truth About Saccharin.** It has been asserted that ingestion of saccharin increases the catalase content of the blood; that catalase increases oxidation in the animal organism, and hence that the use of saccharin by diabetics might be of value. However, the alleged content of catalase remains improbable and unproved. Further, recent investigations show that administration of saccharin, even in huge amounts, does not increase oxidation in the animal body. Saccharin is neither a food nor a potent drug. Its usefulness in dietotherapy is limited to the function of taste (Jour. A. M. A., Nov. 13, 1920, p. 1347).

**Iron, Arsenic and Phosphorus Compound.** The Council on Pharmacy and Chemistry reports that Hypodermic Solution No. 13 Iron, Arsenic and Phosphorus Compound (Burdick-Abel Laboratory) was found unacceptable for New and Nonofficial Remedies for the following reasons: 1. It does not contain ferrous citrate as claimed; instead, the iron is in the ferric condition, apparently in the form of the unofficial and unstandardized "iron citrate green" for which there is no evidence of superiority over the official iron and ammonium citrate. 2. Its name gives no information on the form in which the iron, the arsenic or the phosphorus occurs therein. The term "arsenic" does not indicate that the preparation contains the mild cacodylate. Nor does the term "phorus" tell that it contains the practically inert sodium glycerophosphate. 3. The preparation is unscientific because (a) it is irrational to prescribe iron and arsenic in fixed proportions; (b) there is no evidence that the hypodermic or intramuscular administration of iron has any advantage over its oral administration, and (c) glycerophosphates have not been shown to have properties other than inorganic phosphates, and hence the administration of sodium glycerophosphate as a hematinic is illogical (Jour. A. M. A., Nov. 13, 1920, p. 1358).

## Doctor, You Cannot Go Wrong

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Beaver		
Beckham	J. E. Standifer, Elk City	J. E. Yarbrough, Erick
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\*Names of officers for 1921 will be added to above as they are reported for the year.

Blanks indicate no report received in time for addition.

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### RADIUM AND X-RAY TREATMENT OF CANCER\*

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The effect of radiation from radium or X-rays upon both normal and pathological tissues has been so frequently demonstrated in variously located laboratories that a delineation here would appear as superfluous. Since, however, in recent medical literature so much has been claimed for radium and X-ray therapy which to the uninformed may appear ill-founded, a brief reiteration of the histological findings may give a better understanding of the value of these agents.

#### Effects Upon Normal Tissue

Quoting from Knox,(1) "Radium acts as a stimulant to normal tissues causing congestion of areas exposed to radiations; congestion is followed after an interval of time by increased formation of fibrous tissue. If the exposure is prolonged or the filtration insufficient, the action of the rays become a caustic one, and an acute inflammatory process is set up which may go on to necrosis and sloughing of the tissues exposed."

#### Effects Upon Pathological Tissue

According to the law formed or deduced by Bergonie and Tribondeau, (2) "Immature cells or cells in an active state of division are more sensitive to rays than are cells which have already acquired their fixed adult morphological or physiological characters." "The action of radium rays on neoplastic cells are of an impending, destructive and evolutionary character."

"The radiation arrests the growth of the tumors before it destroys them or renders them harmless by an evolutionary process or metaplasia. Destruction of tumor cells is either a direct or indirect process. In the direct, the tumor cells undergo necrobiosis. The cytoplasm and nucleus disintegrate and the cells are absorbed by phagocytosis. In the indirect destruction, a metamorphosis of the tumor cells precedes the absorption."

#### Chemical Changes Produced

Moreover, recent studies have demonstrated

\* Read in a symposium on Cancer, Section on Surgery and Gynecology, 29th Annual Meeting, Oklahoma State Medical Association, McAlester, May 18, 1921.

that after exposure of only a small area of the human body to radiations of radium or X-ray, changes are produced both in the morphology of the cells and in the chemistry of the blood. The chemical changes produced are: First, a change in the cholesterol content as demonstrated by Luden (3) Second, an alteration in the carbohydrate tolerance as has been demonstrated by Langston and Cecil (4) in our University of Oklahoma Medical Laboratory. These findings may fully explain certain phenomena which have frequently been observed and several times mentioned by radiotherapists, namely: when certain eruptions or new growths are being treated, other like lesions more remotely situated may also be favorably influenced.

#### Kinds Of Rays Emitted

Radium rays, and possibly those of X-ray, are divided into three distinct types according to their influences upon chemicals and tissues of different depths. The effects being mainly due to the difference of wave lengths of the ray. These classes of rays are utilized to therapeutic advantage in the treatment of malignant growths of different depths or cellular morphology. Screens of material such as rubber, aluminum, brass, silver and lead of various thicknesses are used to cut out such rays as are not desired in the particular case. It is now possible to penetrate to a degree of dissolution, deeply situated neoplasms without any or but slight reaction upon the skin. The skin reaction was for many years a serious obstacle to radio-therapeutic progress.

Technic of treatment as well as screening both for radium and X-rays has made rapid progress within recent years. Today the qualified radio-therapist even dares to suggest to the skilful surgeon, the advisability of selecting radium or X-ray for the treatment, not only of the superficial epitheliomas but for deeper malignant growths such as those of the mouth, lower lip, bladder, rectum, vagina or cervix.

#### Radium Technic

The technic which is followed in our office does not differ materially from that which is practiced by others. If the lesion is upon the skin or mucous membrane, is localized and





Case No. 1. Nodular necrosing epithelioma involving the malar and ethmoid.

elevated, we usually apply a ten or twenty milligram plaque of radium from forty to seventy minutes. We enclose the entire plaque in a screen of dental rubber in order to cut out all the alpha and the most superficial of the beta rays. This will, within six to ten days cause a visible erythema followed by a slowly subsiding period. If the neoplasm has an area of infiltration underlying, we then give a series of fifty to three hundred additional milligram hours of radium. For this we use a brass screen of three or five tenths millimeter. This screen eliminates all the alpha and the soft beta rays. Thus we obtain the benefit of all the deeply penetrating hard gamma rays and only the longer radiations of the beta rays. If the lesion is large or deeply situated, or if it be a uterine carcinoma, a longer and more intense series of treatments are indicated. In these cases we give from five hundred to two thousand milligram hours within a period of one or two days, using a screen of two millimeter of brass. In uterine carcinoma we repeat the application within two or three days. A total of three thousand or more milligram hours are given at a single series. In post operative or inoperable carcinomas, we reinforce the radium treatment by numerous crossfire exposures of X-ray, covering the entire adjacent lymph connections where metastasis is most likely to occur.

### X-ray Technic

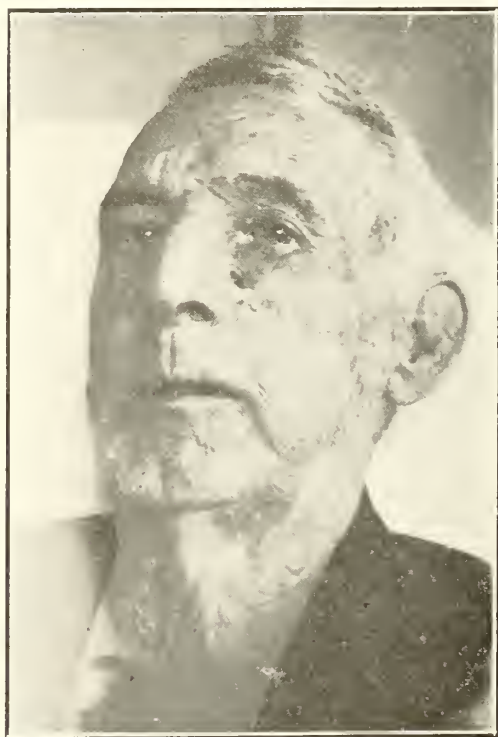
Our technic for X-ray treatments consists first, of penciling off all the necessary areas for exposure. We then interpose a screen of four millimeters of aluminum. The rays are confined to the penciled areas by means of a two and one-half inch lead cone. The tube distance from patient is eight or ten inches. The machine registers three milliamperes and backs up a spark gap or eight or nine inches. Time of treatment; 5 to 8 minutes to each area.

Such series is not repeated until the reaction of the deep tissues has completely subsided or is rapidly declining. This period varies from three to eight weeks, depending upon several factors such as morphology, location, extent and degree of radiation.

### General Consideration

In radium we have a most wonderful agent for the treatment of cancer. It has an almost unlimited depth of penetration and influence, capable of good or evil according to the amount applied and the intelligence or unintelligence of its application. In it we possess the convenience of a capsule of a most inert drug, yet it may represent the potency of the mighty dynamo.

Many of the old vetrans who have witnessed the evolution of the X-ray machine and the development of the Coolidge tube, the im-



Case No. 1. Not more than two years after treatment entirely healed excepting slight sinus from dead bone in ethmoid.

proved methods of screening, positions and measurements of dosage, are also made to wonder at results obtained in modern days by the scientific application of ordinary X-ray therapy.

### Conclusions

Our conclusions based upon experience, also keeping ever foremost in our minds the welfare of the patients, are: First—In many cases which have a doubtful prognosis such as carcinoma of the breasts, uterus or rectum, the operation should be preceded by one or more series of radium or X-ray treatments. This, in order that the obstructive endothelial inflammation which follows may limit in a measure the operative hemorrhage and tend also to prevent the quickly spreading of dislocated cancer cells, an incident which frequently follows extensive operations performed with the keenly cutting scalpel. Second—All post operated cases of malignancy, regardless of location should be followed by one or more series of radium or X-ray treatments unless the surgeon is reasonably certain that metastasis has not yet begun or that his excision has extended well beyond the growth. Third—Radium or X-ray should be the treatment of choice in all cancerous or precancerous lesions of the skin, such as those of the face, neck and hands. Exceptions may be made in certain lesions of hands and of the cartilages of the nose and



Case No. 2. Apparently entirely healed though only six months thereafter.



Case No. 2. Epithelioma covering entire eye, involving the anterior chamber.

ears in which cases radium or X-ray should follow surgery. Fourth—All localized malignancies surrounding the orbit or upon the eyelids should be treated by radiotherapy, preferably radium. Fifth—Reviewing the available statistics upon operations of cancer of the lower lip, and carefully comparing these with a like number of cases treated by qualified radiotherapists, we are fully convinced that radiotherapy is to be preferred. Sixth—Taking into account our personal observations and carefully comparing statistics of radium treatment with those of surgery in malignant lesions of the mouth, we feel sure that all such should be treated by radium. Seventh—Considering the emotional life of the female, her future welfare and happiness, and after making a review of the more recent accumulating evidence from radium treatments, we are becoming more fully convinced that radium is to be preferred in all cases of early or the pre-metastatic stages of carcinoma of the cervix.

The accompanying photos and lantern slides show some of the successful and satisfactory results of radium and X-ray treatment of cancer when situated upon certain above mentioned regions.

(1)—Knox, Robt. *Radiography and Radiotherapy* Vol II. Ed. 2—The MacMillan Co. P 395. (2)—Schmitz, Henry. *The Biochemic Reactions of Carcinoma Cells Produced by Radium*. The American Journal



Roentgenology January 1920. (3) Luden, Georgine: Studies in Cholesterol, J. Lab. and Clin. Med. 4:849, 1918. (4)—From University of Oklahoma Medical School Laboratory. Experimental work not yet published.

## EARLY DIAGNOSIS THE FIRST STEP IN THE CURABILITY OF CANCER\*

A. S. RISSE, M. D.  
BLACKWELL, OKLA.

While there are many unsettled questions with regard to the ultimate etiology and the most efficient treatment of cancer, this one fact is established: In the beginning, cancer is a local disease. This fact is both our hope of ultimate victory and an indictment for past failures. For alas, even in this day of scientific advancement, there are multitudes of the laity—and, it is to be feared, some “doctors” who hold that cancer is “in the blood”. It is because of this misconception that we must continue, both within and without the profession, the campaign of information as to the evolution of malignancy in its various forms. For, once the rank and file of the profession and the laity thoroughly understand that in the beginning cancer is a local disease and is curable, we shall have made a substantial advance in the fight to conquer this terrible disease, and we shall curtail its tremendous toll of human suffering, of avoidable incapacity, and early death.

Early diagnosis, then, is the first step in the curability of cancer—which statement, however, leads at once to several resultant and pertinent questions. First comes the very proper question: “What is meant by early diagnosis?”—In other words, when can diagnosis be considered early enough so that curability may be assured, or at least is probable?

In general, we may answer that diagnosis may be considered early if the disease has not invaded the tissues or vital organs to an extent precluding the complete removal of all cancerous tissue; if metastases have not occurred; if cachexia and anemia have not undermined the vital forces to a degree incompatible with resistance to operation.

According to this definition of early recognition we shall have to revise our accepted standards of timeliness in diagnosis, for it must be emphasized that the symptoms of cancer as given in the ordinary textbooks are late or even terminal symptoms, and they must be discarded as inadequate to fulfill the modern requirements of really early diagnosis. The writer realizes that this is to set a very high standard of efficiency. We shall have to admit into this standard perhaps such terms as “suspicious” and “doubtful cancer”, but this will be a far more justifiable procedure than to

sacrifice so many lives by delay in diagnosis and treatment. For we must acknowledge that in spite of the brilliant advances which have been made in surgical technique and in the application of the Roentgen ray and radium, the present average results of the treatment of cancer are deplorable and discouraging. In spite of the occasional wonderful results of modernized treatment, as W. J. Mayo has said, and practically all surgeons admit, “the majority of cancer patients come to operation too late to be cured.” Statistics are not necessary to emphasize the fact that the first step in the curability of cancer is early diagnosis, for since we have no general or systemic or constitutional or specific remedies for cancer, we are limited in curative methods to local remedies by surgical means, the X-ray and radium, and all hope of cure lies in beginning our treatment early while the disease is still local and limited.

The vast majority of cancer patients consult first their family physician. Thus it is that, in this fight against malignancy, the general practitioner becomes our “first line of defense”. In order to prove worthy of this great responsibility he must be informed as to the probable signs, the early evidences and symptoms of cancer and he must be alert in their detection. In doubtful cases he should not hesitate to seek the assistance of other men skilled in the specialties, whether it be laboratory or X-ray work; gastro-enterology; dermatology; or proctology. Some physicians seem to feel that this is to concede too much, but simple justice to our patients demands that they receive every available means of early diagnosis as well as the best method of treatment. Some equitable basis of cooperation must be evolved whereby the general practitioner may have the scientific help and closer cooperation of the specialist. There must be more “team work” if we are to succeed in the campaign to control cancer. It may not be amiss to remark in passing that people generally are willing to remunerate the surgeon and the specialist with even princely fees. Moreover, they will make that remuneration promptly, while they are inclined to be all too tardy and niggardly in their treatment of the “family doctor”. One remedy for this condition that should suggest itself is for the general practitioner to attain a higher degree of skill and efficiency and to exercise greater care in examination and diagnosis. Then he will be in a position to demand a proportionately greater fee for his more valuable services—in which worthy endeavor he should be firmly supported by the specialists in every line.

The second question which we must attempt to answer, and the main one with which this paper is concerned is this: How may the early

\* Read in a symposium on Cancer, Section on Surgery and Gynecology, 29th Annual Meeting, Oklahoma State Medical Association, McAlester, May 18, 1921.



recognition of cancer be assured? What are the means and methods available to make the diagnosis? What are the data, the signs and symptoms, probable or certain, on which we can base our early diagnosis of cancer? The answer to these questions may be considered in order under three heads. First:—General and special means of diagnosis. Second: External cancer. Third:—Internal cancer.

The primary means of diagnosis of course are inspection and palpation. The personal history of the patient, both past and present, is usually of far greater importance than many practitioners realize and should be gathered in detail—especially so when an internal cancer is suspected. The conscientious use of trained powers of observation and knowledge gained from personal experience and from reading count for much in the correct interpretation of the history and the analysis of other facts discovered in the examination. Percussion and auscultation are of service in the diagnosis of chest tumors chiefly. The examination must discover also the presence of confirmatory or suspicious symptoms. Anemia, cachexia and pain are to be considered late symptoms rather than early. Of very great importance is the information to be gained from the microscopic examination of suspected tissues. Particularly where the problem is to distinguish between that great trilogy of diseases, cancer, syphilis and tuberculosis, we may need to supplement the microscopical determination of the tissue structure and the infective organism if one is present, with special tests for tuberculosis. Inoculation and culture on artificial media are further aids in diagnosis as is the administration of salvarsan (and tuberculin) both for diagnostic and therapeutic purposes.

It would seem scarcely necessary to state that our examinations should be carefully, methodically and intelligently conducted—and yet the fact remains that a large proportion of even advanced cancers are diagnosed too late for cure because of incomplete and inefficient examination. This is an indictment of which we should not be longer guilty. Prejudice, false modesty, a mistaken desire to spare the patient's feelings, fear and ignorance on the part of the patient are frequently hindrances to prompt diagnosis, but perseverance, tact, the habit of thoroughness and professional pride in achievement will almost always succeed.

Some knowledge of the general signs and symptoms of cancer, the relative frequency, age and sex incidence, sites of predilection, the varying tendencies to infiltrate and form metastases, and allied information, it is essential for us to obtain if we would measure up to our responsibility. Not "watchful waiting" but watchful examination must be our slogan in the early diagnosis of malignancy.

It is small credit for any of us to treat a patient for "indigestion", or "anemia" or "gall stones" until the patient himself becomes aware of a mass in the abdomen. We have little cause to congratulate ourselves on our professional skill if we continue to prescribe "pile salve" and suppositories for a patient suffering from an incipient rectal cancer. "Inflammation of the breast" is no longer inflammation when retraction of the nipple, dimpling and fixation of the skin are present over a tumor mass in the gland substance. Spontaneous fractures of the femur may be metastatic from mammary cancer before the primary tumor becomes prominent. Fissures of the lip often undergo malignant degeneration early. Alternating constipation with diarrhoea and dysenteric stools may be a symptom of intestinal cancer as well as of "biliousness". Symptoms of cystitis are usually the first signs of cancer of the bladder or may point to hypernephroma. Vaginal discharges often signify cervical or uterine cancer. Jaundice may result from cancer of the head of the pancreas as well as from cholangitis and gall stones. Incidentally, if stones are present (in the bile passages) they should be removed for it is well known that their mechanical irritation predisposes to cancer.

In the diagnosis of what, for the purpose of this paper we shall designate as external cancer, we shall include the skin and its appendages, the muco-cutaneous junctions, lips, anus and rectum, mouth, tongue, breast and cervix uteri. Here a knowledge of precancerous conditions is essential. Chief among these are certain angiomas, papillomata and adenomata; keloids and the scars of tuberculosis and syphilis; the leukoplakias and psoriasis. The relation between keratosis, chronic irritations, fissures and ulcerations of the skin and mucous membranes and the subsequent development of cancer must be kept in mind and the laity must be taught the importance of curing these conditions promptly. The pigmented moles which so often precede a generalized sarcomatosis should be placed in this same class. Lacerations, ulcerations, and erosions of the cervix uteri precede practically every case of cancer of the cervix. Hence, we must urge our women patients to report abnormal discharges, bloody and leucorrhoeal, as well as other symptoms of pelvic disturbance, for leucorrhoeal discharges, especially if they contain blood, may be the first signs of cancer of the cervix. Also, we must impress upon the minds of women the prophylactic value of repairing cervical lacerations.

Trachelorrhaphy is especially important if the laceration is accompanied by ulceration or erosion. We must learn the fact and emphasize it to our patients that, *as a rule*,

*pain is not an early symptom of carcinoma.* Rather as Deaver has stated in a recent article on cancer of the uterus, "Pain is an indication of infiltration beyond the uterine limits and is, thus, a most discouraging sign". In its very insidiousness lies the danger of developing cancer. In doubtful cases we must resort to a removal, with curette or knife, of a portion of the suspected growth for microscopical study. Here again a little knowledge is not a dangerous but a valuable and, it may be, a life saving thing. The section should be made at right angles to the margin of the growth so as to include a portion of the edge of the tumor in order that we may detect any tendency of the tumor cells to break through the basement membrane. Occasionally, it may be wise to remove sections from several portions of the growth. The infiltrating character of cervical cancer can often be determined clinically by a careful digital examination, as can be demonstrated also the marked tendency of cancer to bleed on the slightest touch. This is in marked contrast to the benign erosions and ulcerations. The microscopical diagnosis should, of course, be entrusted to a competent pathologist. Sometimes it is well, also, to leave the removal of the specimen to him. City and State health laboratories should be prepared and willing to make these tissue examinations promptly and freely. In general, it is well not to allow a long interval of time between the removal of the diagnostic section and operation; for it is at least possible that such removal might stimulate local growth and metastasis. There are those who insist that frozen section examination and immediate operation, if the growth seems not definitely benign, is the only justifiable procedure.

Anal and rectal cancer are often preceded by piles, fissures and ulcers. In fact, we frequently meet patients who complain of "piles" or ulcers in whom a careful examination discloses undoubted cancer. If we wait for pain, difficult defaction, bloody and ribbon shaped stools and obstruction, according to the orthodox text books, we have missed an early diagnosis and the chance to save the patient. Those symptoms should go into the discard. If the suspected lesion is higher up in the bowel we must resort to the proctoscope and sigmoidoscope, best in the hands of a competent proctologist. Having done this we have at least begun our duty to the patient.

In the examination of breast tumors, this fact should be emphasized: Mammary cancer is so common that *every tumor of the breast after forty should be considered as a potential cancer.* Pain, fixation and dimpling of the skin, retraction of the nipple and enlargement of the axillary glands should be considered

symptomatic of advanced cancer. So long as we wait for these symptoms before making our diagnosis and doing a complete operation, we shall continue to have a sadly large record of recurrences and uncured cases. Breast tumors should not be roughly handled in the examination for fear of disseminating cancer cells. For the same reason the diagnostic incision of suspected tumor is fraught with possible danger and should seldom be employed. Over-suspicion and the sacrifice of an occasional breast is less reprehensible than the sacrifice of life by delay in diagnosis and proper treatment. Here, as elsewhere, *eternal vigilance is the price of freedom from the scourge of cancer.*

Internal cancer: Early diagnosis of cancer of the internal organs is most difficult and yet most desirable. For these organs are not accessible to touch and sight and there are no symptoms which are pathognomonic of early cancer. Further, these organs are prone to both transient and recurrent and chronic disturbances of function—any of which may simulate or be simulated by developing cancer—and unless the practitioner is continually "on guard" he may over-look the essential diagnosis. Many a patient has developed inoperable and fatal cancer of the stomach while undergoing more or less vigorous treatment for what was considered a functional disturbance, or chronic indigestion or gall bladder trouble or even "biliousness". It is admitted that the mortality of medically treated cancer of the stomach is 100%. So it is of particular importance in these cases to obtain a careful and complete history of the case, especially so since most if not all stomach cancers are preceded or ushered in by the symptoms of ulcer. Every patient with abdominal symptoms, even unaccompanied by loss of weight and strength, has a right to all the special means of diagnosis; such as a gastric analysis, with both chemical and microscopical tests, X-ray and fluoroscopic examinations by a competent radiologist. However, all these tests may fail to differentiate between ulcer and cancer, between a benign and a malignant growth, and there will be some doubtful cases in which exploratory operation is not only justifiable but urgent, for the modern abdominal section has no mortality per se and it gives us the nearest approach we have to an exact diagnosis. To quote W. J. Mayo: "In the early exploratory operation we have the one diagnostic resource which is reliable and which must be resorted to in a large majority of cases before a surgical diagnosis can be made. Without it the truth is but slowly established at the expense of progressive hopeless involvement. Exploration can be safely accomplished through a small incision and with



a short time of disability. It is said that the patient will not submit to an abdominal incision upon suspicion. Herein we do the intelligence of the public an injustice; we have seldom been refused the opportunity, when the matter has been fairly and candidly laid before the patient and his friends. The plea for delay has more often come from attending physicians."

Procrastination is the thief not only of time but of life—and the purpose of this paper is if possible to stimulate attention to that care in examination and diagnosis and treatment which alone makes us worthy followers of the Great Physician.

### CANCER DEATHS: WHY SO MANY?\*

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Dr. Jno. C. Warren (1) says:—"That it is not likely that a single cause or a single cure will ever be discovered for such a variety of diseases as cancer presents in its different manifestations, but the constantly increasing mass of knowledge which is being accumulated by patient investigation in many different lines of science, and the coordination of these facts by trained investigators, carry us ever forward and nearer the desired goal". Cancer has been recognized for centuries, and probably the first recorded description is that of Rufus of Ephesus (2), who gave a description of epithelioma in A. D. 98. Guy de Chauliac (3) in the 14th century advised the removal of cancer by excision. Cancer of the testicle was reported by Dr. Aeple (4) in 1788 and cancer of the breast was mentioned by Dr. John Baptista de Meo of Palermo (5) in 1784. A description of cancer and inquiry into its causes was given by Dr. Jas. Adams of London in 1745.

Since the days of these early investigators cancer has ever been on the increase. Statistics furnished by the Metropolitan Life Insurance Co. (5) on 37,666 deaths during a period of six years, showed the death rate to be 70 per 100 thousand of population, and cancer was responsible for 59% of all deaths and stood sixth in importance as a cause. Among white males 4.3% of deaths were due to cancer and among white females 8.5%. The mortality rate from cancer among the negro was less, there being 1.8% of males and 5.2% of females. Cancer of the stomach and liver caused 37.6% of all deaths from cancer. A comparison of deaths from cancer and from tuberculosis shows that they run very closely together in the United States, and in some states it causes more deaths than does tuberculosis. The

Bureau of Census Mortality Statistics for the year 1918 shows that the cancer deaths are alarming. In the New England states there is a very large mortality from both cancer and tuberculosis. New Hampshire in 1918 had 107 cancer deaths to 124 from tuberculosis Vermont 99 cancer to 100 tuberculosis and Maine 107 cancer to 118 tuberculosis per 100 thousand of population. In the far West the death rate was less for both diseases, but was closely allied. Washington had 60 cancer to 82 tuberculosis; Oregon 72 cancer to 76 tuberculosis; and California 106 cancer to 195 tuberculosis per 100 thousand of population. In only two states were the deaths from cancer greater than they were from tuberculosis. Kansas had 68 cancer and only 56 tuberculosis, while Utah had 50 cancer to 46 tuberculosis per 100 thousand of population. The lesser death rate in the west may be attributed to the fact that the country is less densely populated and the people are younger and as a whole more robust. In the year 1918 cancer killed 65,551 and tuberculosis 121,204 in the United States. In 1919 there were 65,282 cancer deaths and 106,985 from tuberculosis in this country. The cancer deaths increased over three thousand, while the death rate from tuberculosis decreased nearly 15,000. From 1908 to 1912 the cancer deaths throughout the world were 1 1-2 million in a total of 2 billion 124 million of population, this being at the rate of 71 per 100,000 of population. The largest death rate appears to be among the civilized nations. In Africa and Asia 33 and 54 cancer deaths respectively, while in America, Australia and Europe the death rate for cancer was 65.75 and 76 respectively per 100,000 of population. While the fundamental cause of cancer has not yet been solved, nevertheless it would be unwise to ignore the various theories which have been advanced, since there may be a grain of truth in each. Probably the most generally accepted theory is that of Virchow, that local irritation, either mechanical or chemical, has an important bearing on cancer. No one disputes the frequency in which cancer follows cervical laceration unless proper remedial measures have been employed to repair the damage and it is an acknowledged fact that the Kangri burns of the Kashmiris cause cancer of the lower abdomen, while cancer of the lip not infrequently follows in smokers from abrasions, due to the chronic irritation. Warts and moles are without question potential cancers in many instances, and require only continued irritation for the development of cancer cells. W. H. Mayo advances as the cause of gastric carcinoma the taking of too hot foods into the stomach, while Ochsner lays the blame on the eating of unclean food. Of the more recent

\* Read in a symposium on Cancer, Section on Surgery and Gynecology, 29th Annual Meeting, Oklahoma State Medical Association, McAlester, May 18, 1921.



theories to be advanced is that of infection, by Ochsner (6). He says:—"Only a few years ago Langstaff and others proved statistically and to their mind's scientifically, that tuberculosis is not infectious or contagious, because in many cases the husband or wife suffered and, in many instances, died from the disease the other partner remaining free from it. This identical argument is being advanced in the case of cancer, but the fact that the soil must be properly prepared is over-looked". Ochsner has long held to the theory of infection as a cause and cites as contributory proof the fact that in Japan where people eat large amounts of uncooked vegetable food, gastric cancer is of frequent occurrence, while in India where the people boil their food and drink, they are comparatively free from this form of cancer. He goes on throughout his article making comparisons to prove his infection theory and concludes by saying, "The fact that none of the observers so far have been able to prove to the satisfaction of others that they had found the microorganism causing cancer must not be construed that it does not exist, because the same failures were experienced before the Tubercle Bacillus, B. of Leprosy, Spirochete of Syphilis, the Plasmodium of Malaria and many others were finally discovered.

Intestinal stasis (7) is being brought forward as a cause and in many instances it may be traced back many years, for instance, the constipation and billiousness of early childhood. In chronic intestinal stasis active pathogenic bacteria form poisonous products in the bowel, and these are then carried through the thoracic duct into the general circulation, and to the living cells. While cancer of the small intestine is of infrequent occurrence, that of the caecum is not rare. The primary seat of stasis being nearly always in the large bowel may be the explanation. It is a proven fact that the duodenum contains but few bacteria, while they increase in number until the ileocaecal valve is reached, and in the large intestine the bacteria are again few in number. Pronounced stasis extends congestion and infection of the duodenum into the bile ducts, chronic catarrh of the gall bladder results, stones form and long continued irritation from them may eventually cause cancer. In cancer of the uterus, aside from cervical tears we might think of mechanical obstruction in the pelvis associated with retroversion, as a probable cause. Pyorrhoea due to infection of the mucous membrane of the gums from circulating toxins is a potential source of cancer according to Jordan (7). Cancer of the female breast, one of the most neglected and curable cancers if properly treated, may be due to toxic absorption. Upon the early recognition of the earliest signs of cancer depends its curability, and until we

more fully appreciate this fact, cancer will ever be on the increase. Cancer of the rectum is frequently mistaken for hemorrhoids, for we often forget that hemorrhage may also be a sign of cancer. An early differential diagnosis may save the patient's life or at best prolong it.

Gastric ulcer generally regarded as a precancerous condition in 40% of the cases gives a history usually of a chronic persistent indigestion, and in people over 35 years of age this should be taken as significant of early carcinomatous changes and the patient thoroughly examined at once.

In cancer of the intestines, so insidious that diagnosis is seldom made early enough to enable us to successfully remove the disease, digestive disorders should put us on our guard and a complete and early examination should be made. In the skin, benign lumps or ulcerations are frequently the source of cancer, and warts and moles changing in size, shape and appearance and subject to irritation are all potential cancers and demand early treatment, preferably by free excision. Caustics should not be employed, because they are dangerous and many times deforming. Burns, cracks, fissures and ulcers of the lip are potential precancerous conditions and should be healed or removed promptly, before gland involvement takes place. Cancer of the tongue, the exciting causes being smoking, syphilis, broken teeth and sometimes badly fitting or broken dental plates, spreads rapidly and the operation for its removal is severe, dangerous and mutilating, unless done in the very earliest stage, before metastasis has taken place, if possible. Being fully aware that certain conditions are either potential cancer, precancerous or fully developed cancer, and knowing as we do, that proper treatment at the proper time will in a great majority of instances save the patient, why then is it that science does not reduce, or at least hold the mortality in check? The profession is not wholly to blame, neither is the laity, but the blame is a collective one embracing many causes.

The writer will classify them in the order in which seems to him to be the most logical, as follows:—(A). Carelessness of the profession. (B). Carelessness of the people. (C). Quacks and Cures. (D). Inopportune, Incomplete and Improper surgery combined with neglected pre- and post-operative treatment.

(A). *The family physician sees these patients first and it lies within his power, and it is his duty to inform them of the gravity of their ailment.* But oftentimes the examination is a perfunctory one and his opinion given without due consideration of the findings or, perhaps his diagnostic acumen is at fault. It is a scientific

fact that cancer of the breast and cervix are readily diagnosed in their early stages, and there can be no excuse for these passing beyond the curable stage if the patient has been properly examined and advised, providing the examiner has given the proper examination, *after obtaining a careful history*. Therein lies one reason for the mortality from cancer. Too many physicians fail to give the patient the necessary warning of the earlier signs of cancer, in order to bring them to a realization of the gravity of the condition. They either fail to recognize it or, if they do, hesitate to tell the patient the true condition. Every patient who presents the least suspicious signs of a malignant condition should be carefully examined, and, if found suffering from one, should be told the whole truth without any mincing of words, no matter how disagreeable the news may be, for it is only by so doing that we can bring them to treatment while yet treatment will be of some avail. Tell them as gently as you can, but without reservation. Neglecting to do this is the cause for so many inoperable cancers coming for operation.

(B). *Neglect and procrastination of the patient are responsible for many cancer deaths.* Many patients after they have been informed that they, in all probability have a malignant condition, either doubt the diagnosis or fail to take heed in time. They go about advising with their old lady friends, who have always known some one who had the same condition and was cured by Tanlac, Swamproot, Lydia Pinkham's Pills, or perhaps some Osteo or Chiro rubbed it out, and into the circulation. While chasing these will-o-the-wisps, golden moments are passing, for cancer usually travels a fast pace after it has begun, and later on they realize their mistake, but all too late. Frequently dread of operation keeps the patient away too long, because we have not told them that the danger of operation is much less than the danger of the disease. Until the physician gains the confidence of the people, as well as their respect, we cannot expect them to believe us when we tell them the truth. The fact of the matter is, that too many so-called ethical men tell the patients falsehoods for the purpose of doing surgery, or better said, doing an operation.

At the present time in Oklahoma, it seems as though the decent profession has lost the respect of the people, as evidenced by the vote on the Chiro bill. Even our late lamented legislature composed of many college graduates showed its respect (?) for us by passing every quack measure that came before it. By its acts, men have been licensed to give drugs, including narcotics, who are graduates of so-called schools that pride themselves on teaching

drugless healing. It would seem as if the people do not want our advice and personally it appears to be about time to cease giving it, and if the people want to listen to the advice of some fanatical editor, and shorten their lives that should be their own affair.

(C). *To quacks and cures we must give due credit for many cancer deaths*, and is a fact that cannot be controverted. These vultures make it a practice to advertise in a yellow sheet, with a homelike name, which goes mainly into homes in the rural communities. These "ads" all claim to cure cancer by internal and external medication, without the use of the knife, and this appeals very strongly to the sufferer, who ignorantly takes the chance, believing that nothing but the truth appears in these advertisements, with the result that valuable time has gone by, and the condition is now an incurable one. A very recent review of some of the literature spread broadcast by these quacks, shows that most of the books contain only a few pages of reference to cancer, but are largely made up of photographic cures and testimonials. In looking through the books, no single instance could be found in which there was scientific proof that the patient had cancer. The diagnosis was made in all instances by the patient himself. These reported cures by medicine and without the use of the knife are either downright fabrications or are based on the removal of conditions, which were not actual cancer but in appearance and behavior similar to cancer. In many instances fraud orders have been issued against these concerns. The cancer cure of one of the most notorious of the fakers consists of four prescriptions as follows: (8) No. 1—Is a syrup resembling Syr, Sarsaparilla. No. 2—A mixture of Almond, Cotton Seed and Bitter Almond Oils. No. 3—Tablets Camphor, talcum and sugar. No. 4—Cataplasmi Kaolini. It is easy to see what must be the inevitably disastrous results which must follow this treatment in cases of actual malignancy. Until we can purify the press, and as long as the U. S. mails permit these publications to be sent broadcast, just so long will these hyenas flaunt their false and fraudulent statements in the face of scientific facts, and the dear people will swallow the bait, and like the other "poor fish" will pay the penalty with their lives.

(D). *Incomplete, Inopportune and improper surgery, as well as neglected pre- and postoperative treatment*, play no lesser role in the mortality of cancer. There can be no question but that many unnecessary deaths can be attributed to incomplete surgery. It is now an established surgical fact that no operation for advanced cancer is complete without a thorough removal of all the accessory glands if there be



the least doubt of their involvement, for if this is not done the disease promptly recurs and usually in a more malignant form.

The operation for the removal of cancer calls for the best technical skill, as well as anatomical knowledge, and no one should attempt the operation unless he is a fairly good master of these, and of the two we consider good anatomical knowledge the more important, since a good anatomist never gets lost and the danger of doing harm is much lessened. Many cases are operated upon that should have been let alone, because too far advanced, and the operation only hastens the death of the patient. The attempted removal of an inoperable carcinoma is little less than criminal because no possible good can be gained, and the prompt recurrence and death of the patient is one more stigma on the honest members of the profession. Untimely surgery serves to lessen public confidence in the profession, and may cause some to hesitate where otherwise they would take advantage of the opportunity, while there was yet time. The laity is no judge of the capabilities of the professional man, and the fellow who "blows his horn" the loudest and does the poorest surgery is the fellow who takes in the "dough" no matter how incompetent he may be. Clever operators who achieve great dexterity and rapidity in their technic are looked upon by the public as great surgeons, while in many instances great surgeons are regarded by the profession as ordinary operators.

While the value of Radium and X-ray has not been fully established, still in the light of modern research, the failure to use them either after operation, or both before and after, must be considered a breach of good technic and treatment, for the chances of doing good far outweigh the danger of doing harm, when used by a competent radiologist.

### Conclusions

Since we do not know as yet the cause of cancer, it would be impossible to set forth any definite course of treatment which would prevent it. We should, however, take heed of the various theories advanced and act along the scientific lines now laid down for its cure. While macroscopical cancer is often curable, if properly treated, the keynote in the prevention of cancer deaths is the diagnosis of it while it is still *microscopical*, and this can only be done by making more painstaking examinations of our patients, and until this is done there will be no decrease in the mortality from cancer. I believe with Dr. Recaud of the Pasteur Institute in France, that reputable medical organizations should formulate some methods of advertising in the daily press to combat this misleading advertising of the quacks. The fact that it has been considered

bad ethics to advertise, places a restraint on us, and gives the quack his golden opportunity to do so much harm. Fulllest publicity should be given to all the facts concerning cancer and its treatment. There is no way to give this publicity, unless we go to the public press with it for none of the laity reads our dissertations in the journals, and if they did they would not know what we are talking about because of technical language. It is a question in the writer's mind, whether it might not be better to do this than to permit so many unfortunates to die from neglect and misinformation. The Franco-Anglo-American League Against Cancer advocates this idea. Again I say, that until we bring the people to a realization of the mortality from cancer when not treated early, and its curability when it is, until then we will have no decrease in cancer deaths.

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### THE MORTALITY FROM CANCER THROUGHOUT THE WORLD;

Continent	Frederick L. Hoffman		
	Population	No. of Deaths from Cancer	Rate per 100,000 population
Africa	9,041,866	3,018	33.4
America	382,549,311	251,438	65.7
Asia	272,814,962	148,447	54.4
Australia	27,886,740	20,345	73.0
Europe	1,431,996,861	1,096,716	76.6
Total	2,124,289,740	1,519,964	71.6

Comparative Death Rate from Cancer 1901 and 1911 According to Age and Sex Included in the Registration Area in 1900.

(Conn. Dist. of Col., Md, Maine, Mass., Mich., New Hampshire, New Jersey, New York, Rhode Island and Vermont)

	Rate per 100,000 population..					
	1901		1911		Increase and decrease for 1911 as compared with 1901.	
	Male	F	Male	F	Male	F
Under 5 yrs.	3.8	3.1	3.1	3.0	82	97
5—9 years	1.3	0.8	1.3	1.1	100	138
10-14 yrs.	0.9	0.9	1.0	1.5	111	167
15-19 yrs.	1.9	2.2	2.9	1.7	153	77
20-24 yrs.	3.3	4.5	4.9	4.6	148	102
25-34 yrs.	9.4	17.5	8.7	19.4	93	111
35-44 yrs.	32.5	89.6	31.1	92.5	96	103
45-54 yrs.	90.0	205.4	109.2	227.0	121	111
55-64 yrs.	203.8	331.8	283.4	422.3	139	127
65-74 yrs.	366.0	468.9	512.8	617.8	140	132
75 and over	520.8	589.8	730.5	848.7	140	144
25 yrs and over:						
Crude Rate	90.9	158.7	117.7	195.0	129	123
Standardized Rate*	90.4	160.3	117.9	195.9	130	122

\* Standardized on basis of standard million of England and Wales.



## MORTALITY STATISTICS

Bureau of Census

1918-1919

1918

Age Periods	Cancer		Tuberculosis	
	Female	Male	Female	Male
Under 5 years	157	172	3,285	3,776
5-9 years	69	71	1,066	1,062
10-14 "	52	72	1,849	1,023
15-19 "	109	107	5,524	3,643
20-24 "	206	160	8,587	7,211
25-29 "	461	255	7,917	8,130
30-34 "	936	406	6,107	8,077
35-39 "	1,723	738	4,724	7,648
40-44 "	2,848	1,210	3,565	6,455
45-49 "	3,908	1,841	2,715	5,732
50-54 "	4,417	2,785	2,014	4,585
55-59 "	4,856	3,422	1,681	3,486
60-64 "	4,871	3,888	1,406	2,687
65-69 "	4,725	3,903	1,205	1,889
70-74 "	3,986	3,405	929	1,124
75-79 "	2,797	2,318	557	556
80-84 "	1,591	1,234	253	222
85-89 "	636	1,500	88	72
90-94 "	184	104	18	15
95-99 "	27	27	3	8
100 "	7	6	1	2
Unknown age	53	39	143	164
Total	38,619	26,663	63,637	67,567
			1918	1919
Cancer			65,282	68,551
Tuberculosis			121,204	106,985

## SURGICAL TREATMENT OF CANCER\*

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MUSKOGEE, OKLA.

It would consume too much time and tire my listeners should I attempt to cover the surgical procedure in cases of cancer occurring at various places within the body. Nor shall I attempt the impossible by laying down certain rules governing procedure in all cases. Success in the treatment of cancer depends upon the earliest possible diagnosis.

There is no class of surgery which is more uncertain and difficult of prognosis than that which deals with cancer. A patient with an apparently hopeless carcinoma of breast will make a recovery when the next patient, with a small carcinoma and one which looks very favorable, will prove to be unfavorable. In cases of cancer occurring in certain locations we feel that there are well defined lines of procedure and yet those same principles are not applicable to cancer in other places in the body. In case of carcinoma of the uterus some operators go so far as to attempt to clean out the glands in the posterior portion of pelvis. The same operators will not attempt to remove the three groups of glands which drain the prostate. The surgeon who with scrupulous care will clean all the glands from the axilla of a case of carcinoma of the breast, will not think of removing post peritoneal glands when doing a

pylorectomy for cancer. I do not wish to be misunderstood nor to discourage radical surgery in treatment of cancer for I feel that the case of cancer which is not curable by surgery is not curable by any other means. I must admit, however, that any treatment of cancer is discouraging. There is always that uncertainty and one is ever thinking "Have I removed all of the growth?"

It is far better to continue in the enthusiasm of youth than to recede to the ultra conservation of old age. There is not a more difficult question in surgery to settle than to determine when surgical intervention in cancer will avail nothing. This is a general statement and rather intended to deal with that class of cases which have reached the state when it is not possible to give a definite prognosis; that state when one does not feel rather sure of removing all the growth without exploratory incision. As one's experience in surgery of cancer increases one tends to draw away from the extremely radical and approach the conservative camp. Repeated disappointment- in cases in which an extensive removal has been done only to be followed by recurrence- is sure in time to dim the ardor of the most enthusiastic, save in those very early cases of cancer. In the very early cases the duty to intervene is clear enough, in the late cases with metastases at a distance and involvement of neighboring structures, wisdom of conservation cannot be questioned. There are cases, however, which lie between these extremes; the growth is large, lymphatic involvement extensive, adhesions to neighboring structures; shall one take the small chance which is offered by radical removal or allow nature to take her course? It is a dangerous point of view to fall into the state of mind of thinking all except the very early cases are hopeless. Even though one encounter those cases which are doubtful the surgeon is under obligation to relieve as well as cure and when there is an element of doubt- he is not certain that surgery will give relief- he is justified in undertaking exploratory operation. There is no way to determine accurately the prognosis in a given case. We have a great deal of data on relative malignancy, some of value, but the best is rough kind.

It is the occasional case with both gross macroscopic pathological picture unfavorable that does well, which obligate the surgeon to offer operative relief. It is not for us to debate what the effect of an unfavorable outcome will be. Do as we would be done by- give the patient that extremely small chance and we will at times be repaid for our trouble by seeing a life prolonged in comfort

611-15 Surety Bldg.

\* Read in a symposium on Cancer, Section on Surgery and Gynecology, 29th Annual Meeting, Oklahoma State Medical Association, McAlester, May 18, 1921.

## PATHOGENESIS OF MALIGNANCY\*

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In taking up the subject of cancer we realize that we are dealing with a condition which has a limitless field of study and research and a veil of theory and mystery that has been but barely penetrated up to the present time by medical science. A presentation of this subject would be neither complete nor scientific if we did not include a portion at least of the findings of the master minds of our profession who have devoted their lives to a study of this condition: so for this reason I am quoting from such men as Roux, Gaylord, Ziegler, Murphy, Fibiger and others in addition to my own personal experience.

The purpose of this paper will be to present to you, who will bear with me in its consideration, not perhaps so many new and unproven theories but a resume of some of the better established ones with which you are possibly already familiar.

It is well in this connection to consider some of the definitions of the term cancer.

*Ziegler:* A Neoplasm is a new formation of tissue, apparently arising and growing independently, having atypical structure, inserted uselessly in the organism, possessing no function of service to the body, and showing no typical termination to its growth.

*Gaylord:* A Neoplasm is a growth springing from the tissue of an individual composed from cells derived from the normal pre-existing cells, which have, however, been so changed as to make them cancer cells. These changes endow the cells with the power of limitless proliferation at the expense of the surrounding tissues. This power of growth may be such that when they are transplanted to distant regions of the body, they may, on finding suitable environment, produce secondary growths or metastases.

As to the origin of cancer cells, former theories have indicated that they are embryonic cells which have existed within the organism since birth, and from some unknown cause suddenly begin to develop and proliferate the surrounding tissues: but this theory I think our findings will seriously question, if not entirely disprove.

With the different types of cancer, their method of development, and their differentiation from normal cells, I am sure you are all familiar and that detail we will not discuss.

Cancer research has taught us through the intensive study of different neoplasms in animals that each growth has peculiarities of its own as to its pathological behavior. The speed

of growth of the cells may vary in a given tumor at different periods: thus a malignancy in the beginning grows slowly as a rule, but may at any time develop a high degree of activity, or at any time it may lose its factor of malignancy and again it may decrease or increased by manipulation or mechanical interference.

The effect of a neoplasm upon the human economy is both local and general, i. e.: not only is the local tissue affected but there is a general tearing down and loss of resistance in the entire organism. We find the individual suffering from a malignancy to be much more susceptible to many of the infectious conditions and contagious diseases.

Oftimes a malignancy begins in a tissue without any known cause but more often there is a history of an injury or an irritation which has extended over a greater or lesser period of time.

This brings to our mind the question. Is there not constantly within the organism cancerous products which are, so to speak, held in check by certain resisting power, having an immunizing effect upon these products. Therefore, is it going too far to presume that there is a degree of immunity existing at all times within the individual, which must be broken down before a neoplasm can develop?

If this condition does not exist how shall we explain the fact that when we receive an injury at a given point there may, and does not uncommonly, develop a neoplasm of malignant character.

Again constant irritation, such as an ulcer, may terminate in a malignancy. This being true there must be some unknown immunity holding in abeyance the activity of these cancerous products until lowered vitality, irritation or traumatism causes a destruction of this immunity and thus produces a fertile field for malignant activity. May we not rightly conclude that focal infection may be a predisposing factor in breaking down this vitality and destroying the immunity. It is not quite common for neoplasms to occur in inactive organs, such as the uterus after menopause, thus proving that previous traumatism has lowered its vitality and resistance. Another example in this connection would be smokers' mouth.

Does it not then seem reasonable that there is within the organism that substance which produces malignancy under favorable conditions, and that this substance will produce all forms of malignant activity, the form and activity, depending on the time and tissue attacked: as example of this, younger people have less resistance in connective tissue while senility shows lower resistance in glandular structures.

\* Read in a symposium on Cancer, Section on Surgery and Gynecology, 29th Annual Meeting, Oklahoma State Medical Association, McAlester, May 18, 1921.

In order to prove that immunity to cancer exists in the organism it is also necessary to prove that a cancer virus or substance capable of reproducing its kind is present. For this proof let us look to animal experimentation.

We have come to recognize a group of sarcoma in chickens that is similar to genuine sarcoma. Roux has shown that they are caused by a virus which is filtered from ground up sarcoma cells or may also be obtained from dried sarcoma. For many years laboratories have been transplanting sarcoma in rats but have yet been unable to filter a virus from rat sarcoma.

The experimental study of chicken sarcoma shows three varieties: Simple spindle cell, atypical spindle cell and osteochondro sarcoma. The virus of each of these types when injected produces its like. There is also found a sarcoma in dogs and the German hare that is of the round cell type and Fibiger has proven that true epitheliomas exist in the esophagus and stomach of rats. There is a type of growth in fish resembling malignancy and has been reproduced in dogs by feeding the dogs scrapings from the trough where the fish were cleaned.

It has been observed that mice, having been successfully inoculated with a virus from one of these forms of malignancy, frequently recovered spontaneously and that when they recovered they could not be again successfully inoculated with the same virus. It was further demonstrated that when the blood of recovered mice was admixed with a given proportion of cancer tissue to be used for inoculation, in many cases no growth resulted thereby proving that the blood of recovered animals contained anti-bodies capable of destroying the activity of cancer cells. Bashford also has proven that when cancer virus has been injected into recovered animals it produced no growth.

It has been proven that cancer cells penetrate the blood vessels and lymphatic walls and are free to be transported in the circulation from the early beginning of growth: if this be true and they are still unable to produce early metastases there must be some form of immunity existing within the organism.

Naturally we now ask ourselves the question: What is the nature of cancer immunity and how is it produced. For several years investigators have known that immunity could be produced to some extent by using blood of immunized animals and virus tissue, best of all spleen tissue. It has been found that if chicken embryos were inoculated with malignant cells and subsequently with adult immunized splenic tissue the malignancy will not develop. Further than that: if the malignancy is allowed to begin to develop before the spleen

tissue is injected that after its injection the malignancy will retrogress.

Various observers have shown that removal of the spleen from a normal animal increases its susceptibility to inoculation and Murphy obtained the same result by treating mice or rats with repeated daily doses of Xray for the purposes of injuring the lymphatic apparatus.

It thus appears that the immunity to neoplasms, as well as to bacterial infection, is produced by the lymphatic apparatus, the principal organs of which are the spleen and bone marrow. To confirm this statement I have studied the report of 516 cases of primary neoplasms and not a single neoplasm of spleen or bone marrow occurred. Also metastases in these organs are very rare, even at a late stage.

It has been studied and to some extent proven that if in the early stage of the malignancy a part of the tumor is removed or a hemorrhage is produced or some chemical is introduced, the tumor will frequently disappear, whereas the procedure in the later stage will greatly increase the activity.

Thus we see that the opportune time for surgical or mechanical interference is in the early stage or at the height of the immunity,

As yet, however, we have no way to prove the height of immunity in the human organism, although it has been proven in animals that at the height of immunity, secondary inoculation was unsuccessful but in the later stages it was again possible.

Repeated anaesthetics have a tendency to hasten malignant growths as well as bacterial infection, thus the possible desirability of gas or local anaesthesia in these cases.

It is needless to state that the understanding of these facts make it possible for us also to understand certain vagaries with regard to cancer cases. They suggest to us that the indiscriminate use of the Roentgen-ray in these cases produces an increase in activity of the malignancy by a destruction of a part of the lymphatic apparatus: and in the same way the use of radium may first diminish the activity and afterwards cause an increase.

#### SUMMARY

1. Cancer is not the result of an embryonic cell embedded within the tissue.
2. Any type of cells within the body may become malignant under favorable conditions.
3. Cancer substance or virus may exist within an organism for a long period of time and be held in check by an immunizing substance which also exists.
4. That there is a cancer virus has been proven by animal experimentation
5. That an organism is capable of producing an immunity to this virus has been proven in the same way.
6. That any surgical or mechanical inter-



ference should be performed at the height of this immunity.

7. A method of determining this immunity in the human is yet to be discovered.

**Report of Case No. 1.** Patient is married lady, age 26. Family History, negative. Has had usual disease of child hood, appendectomy performed one year previous with no improvement. Patient reported at my hospital in 1917. Suffering pain- emaciation, constant vomiting. Physical examination revealed tumor near pylorus. Peristalsis of stomach very noticeable. Laboratory, X-ray, and other findings proved obstruction of forward movement of contents of stomach.

A clean cut successful operation of Gastro-enterostomy was performed. Due to large extensive complicated neoplasm, involving pylorus and surrounding structures it was undisturbed.

**Diagnosis.** Large round cell sarcoma, made by examination of removed specimen by Dr. Huston. The patient gradually improved. The tumor has entirely disappeared. She is now well and hearty.

**Report of Case No. 2.** Patient, male, age 56, reported to our hospital at Cherokee, 1919, for diagnosis and treatment. Family history, negative. Had diseases of childhood. Has been suffering digestive symptoms about one year consisting of pain, irregular appetite, periodical vomiting, loss of sleep, and emaciation. Specimen sent to State Laboratory, findings proved carcinoma. I performed gastro-jejunosomy with success and for some reason as in above case the neoplasm was undisturbed. I saw the patient last week. He is feeling good, looks healthy, gained weight, and the mass has almost disappeared.

**Case No. 3.** Reported in January, 1921, suffering almost identical symptoms as above case but with less neoplastic growth and much less involvement of surrounding structures.

I performed a successful clean cut resection and gastro-jejunosomy. The patient improved for period of two weeks. From this time till death which occurred at eight weeks there appeared rapid increase in malignancy and metastasis.

**Case Nos. 1 and 2 Summary.** The operation was performed under the hope of reestablishing normal physiological action of digestive system, thereby maintaining normal immunity and metabolism.

**No. 3.** Removal of neoplasm and Gastro-jejunosomy established under the hope to eradicate the disease and reestablish functioning digestive tract. Results were traumatism of tissue, shock and anesthesia, lowered metabolism, destroyed immunity, thereby giving vent to malignant activity.

## PROCEEDINGS OF THE UNIVERSITY HOSPITAL CLINICAL SOCIETY.

Oklahoma City.

April 1, 1921

(1) **Cancer of Tongue With Metastases to Glands of Neck.** (2) **Melanotic Sarcoma with Metastases.** By Dr. Horace Reed. (3) **Adeno-Carcinoma,** By Dr. Lea A. Riley.

**Dr. Horace Reed: Cancer of Tongue with Metastases to Glands of Left Neck.**

Two cases are presented to illustrate the ease with which a metastatic growth can be mistaken for a primary tumor. In the first case the mistake was made elsewhere; the patient having never been informed, before he entered the hospital, that a small ulcer on the border of his tongue was the cause of a large tumor in the side of his neck. The mistake in the second case was made by the house staff and myself in this hospital.

**Case 1.** R. P. M. Age 56 years. Entered hospital 3-25-21 on account of a tumor, size of orange, on left side of neck. He first noticed this tumor in November 1920. At that time it was only a small, hard nodule. Growth has been rapid until now it is the size of an unhulled walnut. Patient first noticed a soreness well back on left border of tongue about one year ago. He thought at first that it was caused by an injury from a husk of popcorn. Later he was advised that sharp edge of molars was the cause, and the teeth were extracted. The ulcer on tongue has been treated by cauterizing, with what substance the patient does not know. In other respects the history is immaterial. The tumor of side of neck presents all the physical characteristics of a malignant growth.

The lesion of the border of tongue can be better felt than seen. It is a hard, nodular growth, situated more under the border of the tongue, and is slightly elevated beyond the tongue surface. It does not exceed 1-2 inch in diameter.

**Diagnosis:** Cancer of tongue with metastases to glands of neck.

**Case 2. Melanotic Sarcoma with Metastases** S. T. B. Age 64 yrs. Entered hospital first time Feb. 5, 1920, presenting a tumor, size of unhulled walnut, on lower end of sternum. The growth was first noticed about eight months ago, and the increase in size has been gradual. A few days previous to admission his physician had incised the tumor, and recovered only a profuse flow of blood. The blood Wassermann was negative.

The diagnosis being uncertain, it was arranged to have rapid frozen section at time of operation.

**Operation 2-7-21.** Tumor with adjacent portion of sternum removed. Pathologist reported malignancy-sarcoma. Wound healed

by primary union and patient discharged 3-1-21.

Returned to hospital second time 3-29-21 because of an infection of his right heel. At time of previous discharge he noticed a small nodule about the size of a bean just above the right ankle. This gave him no trouble, so he did not report it to the doctor. Since leaving the hospital this swelling has gradually grown larger until now it is about the size of a quail egg. About one week ago he first noticed a small swelling on the right heel, and this at present is also about the size of a quail egg. The discoloration about the heel was first noticed about ten years ago. These patches have gradually grown larger until it now covers the entire heel and part of the plantar surface of the right foot. This area of discoloration has never given him any trouble or inconvenience in any way. Patient has noticed that this patch of discoloration gets smaller at times and less dark in color.

The intern noticed the patch at the time of the patient's first visit to the hospital, but it was given only a passing notice, the patient explaining that it had been there about ten years and never bothered him.

The tumor of sternum was, undoubtedly, a metastasis from growth on heel.

**Dr. Lea A. Riley: Adeno-Carcinoma.**

Wm. C. aged 47. Single. Salesman. Had typhoid fever 7 years ago. Pneumonia twice when 14 years old. Influenza in 1918. Convalescence short. Potts fracture at 8 years. Family history negative for t. b. c., cancer, kidney and heart and nervous troubles. Habits good. Lived in Texas, Oklahoma, Kansas and Alabama. Usual weight 170, present weight 130.

November 19, 1919, was stricken with sudden sharp pain in left lumbar region causing him to become unconscious and remained so for two hours. Pain left soon after regaining consciousness. Had a profuse diarrhoea passing a bloody stool. October, 1920, had hemorrhages from bowel for three weeks. November, 1920, bloody stools for ten days. Would have "nervous spells" accompanied by vomiting which would give him relief. Noticed harsh foods disagreed with him.

Came to hospital because of pain in upper left quadrant relieved by passing flatus or by defecation. Is very weak and short of breath all the time. Has had fever and night sweat for some time. Pain in the abdomen is greater 15 or 20 minutes after a meal, causing bloating which is relieved on belching and passing flatus. Left leg seems to drag while walking. Erector Pili muscles stand out very prominently when stroking the abdomen with finger, but soon go back to normal.

Points noted on examination are: Palpable movable mass in *left upper quadrant* of abdomen.

which varies in size and tenderness from day to day. Corresponds to location of spleen and thought to be spleen as it increased in size getting as far as umbilicus and to iliac crest then would get smaller.

Pneumoperitoneum showed spleen in normal size and position and seemed to have pushed the tumor toward the center of abdomen. Barium meal and barium enema showed a *filling defect* in transverse colon on X-ray plates.

*Glucose tolerance* test made 4-8-21. Showed a curve indicating malignancy (Friedenwald). Blood sugar on fasting stomach was 75 mgms. per 100 cc. of blood. Forty-five minutes after 100 cc. glucose by mouth, blood sugar showed 256 mgms. and in three hours it showed 194 mgms. per 100 cc. of blood.

*Blood findings:* Haemaglobin 50%, R B C 3,450,000, Color index -1, very fragile, some achromia, polychromatophilia marked anisocytosis, no nucleated reds, W. B. C. 9000-17000. Polys 71 to 84%. Basophiles 2, Transitionals 2, L. L. 6. S. L. 17. Eosinophiles 2% in one examination. Urine negative on each examination. Stool contained occult blood on each examination. Warm stool continually negative for ameba. Proctoscopic examination showed negative.

Arcus senilis very marked for one of his age.

Liver palpable 4 cc. below ribs. Wassermann (blood) negative. *Continued fever* ranging from 97-103 and *colliquative night sweats* up to time of operation.

Maintained his weight all through stay in hospital. Numerous blood cultures continually negative made us give up a septicemia which was an entrance diagnosis.

No heart pathology or petechial spots noted at any time in connection with negative blood culture negated a malignant endocarditis.

Dr. Horace Reed operated case by a left rectus incision on 4-11-21. Found cylindrical tumor of transverse colon six inches in length with enlarged contiguous lymphatics. Did a lateral anastomosis and put patient back to bed. His convalescence was most placid and he left hospital 5-7-21 looking like a different man and to all appearances cured, gaining seven pounds; however, Dr. Reed thought he was not able to get all the carcinomatous tissue. Dr. Langston reported tumor was as Adeno-Carcinoma with breaking down of center which accounted for high leukocytosis and sweats and fever.

Sugar tolerance curve on 5-7-21. Was 124 mgms. of blood sugar on fasting stomach, 229 mgms. forty-five minutes after 100 gms. of glucose per mouth and 273 mgms after three hours. This would indicate that carcinomatous mass was not all relieved, or that the change of tolerance of the long illness let it run the ascending curve.

# PROCEEDINGS OF THE OKLAHOMA CLINIC "ROUND TABLE"-WESLEY HOSPITAL

April 8, 1921

**Dr. A. L. Blesh:** Radium in in-operable Carcinoma.

In studying the effects of Radium on malignant growths, we are sometimes surprised by its seemingly almost miraculous results. Just such a surprise I wish to report this evening in a case referred by Dr. Fraley of Hominy. Dr. Fraley is one of the most conscientious and careful diagnosticians referring cases to our service, but occasionally the very best of us let things slip by. None of us are 100% efficient. If human beings were so, we would be gods. This case, No. 7001, a young married woman, had been under Dr. Fraley's care for a vaginal discharge for which he had given local treatments for some time, overlooking a growth on the posterior cervical lip vaginal cul-de-sac and recto-vaginal septum. While treating her one day to his astonishment he discovered it and immediately brought her to the Clinic.

Examination revealed an extensive, infiltrating, fungating neo-plasm involving the cervix vaginal cul-de-sac and recto-vaginal septum which bled freely to the touch and presented all the clinical appearances of epithelioma. Patient's health was deteriorating and she was losing weight. Wassermann negative. No clinical stigmata of lues. Pathological report Epithelioma Malignant. How long this growth had existed could not be ascertained. It was inoperable in that it involved so much of the recto-vaginal septum that surgery to have been sufficient would have necessitated the destruction of this partition. So far as the uterus itself was concerned an operation for its ablation could have been done. Beginning on the epithelial covering of the parts, the growth in its extension had not yet penetrated deeply enough to fix the parts. We were, therefore, hopeful that the deep lymphatics were not yet involved and that the distant metastases had not yet occurred. It must have spread itself rapidly over the epithelial covering of the cervix and vagina to have so long escaped the eye of the treating physician.

The patient was anesthetized, the actual cautery applied to the growth as extensively as possible and 50 mg. radium applied in the cavity for 20 hours. The patient was returned to her home in a few days with instructions to return in 30 days. Upon her return examination showed that the entire surface except for a small erosion as large as a split pea, had healed over and was covered with normal pink epithelium. The patient was much improved in every way.

Have we cured her? We cannot answer that question as yet, but this we do know that nothing that we could have done without the radium would have given us the remarkable result that we have already secured.

**Dr. M. E. Stout:** Advance Cancer of the Uterus With Combined Surgical and Radium Treatment.

Mrs. G--- Case No 6827. Age 44.

Patient applied to Clinic Nov. 17, 1920, on account of severe hemorrhage from the uterus, which had weakened her until she had been in bed for six weeks. She was very weak, anemic, pale, and cachectic.

Her family history was negative. She had always been strong and healthy. Had "Slow Fever" at 19. Good recovery. Menses began at 11. Regular 28 day type, flow three days. No pain. Married at 19. Para III. Labors normal. No complications. At about the age of 38 her menses became irregular and somewhat profuse. About two years later she began having a slight bloody discharge between her periods. Eighteen months ago the flow became continuous.

In February 1920, she was referred to a surgeon who operated her for a tumor of the cervix. She made a good recovery, but three months later the hemorrhages recurred and she returned and was reoperated. Another small mass was removed from the cervix. At neither time was the tissue examined, or at least patient was not informed of it if it was done. She had no idea that she had a cancer.

She made a good recovery from the second operation but soon she began flowing again and she had flowed profusely for more than two months before consulting us and appeared septic.

The physical examination was negative except for the uterus which was about five times its normal size and there was a bloody sloughing mass presenting at the cervix.

She was permitted to rest in bed over night with a hot lysol douche every four hours before operation. The uterus was loosened up through the vagina and an abdominal Pan Hysterectomy was performed. The ureters were exposed and a large mass of glands dissected from around the right one. 50 m. g. of radium was incased in a rubber drainage tube and inserted in the pelvis with the end of the tube protruding through the vagina for removal. The rectum and the bladder were both packed well away from the radium with gauze which also protruded through the vagina for removal. There was no attempt to close the vagina and a tube drain was inserted through the abdomen for fear of contamination.

The radium and gauze pack were removed



in 28 hours and the drainage tube two days later. The patient made an uneventful recovery and is having radium treatment every six weeks, both through the vagina and over the abdomen. She has gained some 20 or 30 pounds, is doing her own work and feels perfectly well. However, we fully expect a recurrence and have so informed them, but the relief and comfort and extension on life has been well worth the efforts.

It is our opinion that this combined method of treatment with surgery and radium offers more lasting relief and a better chance for a cure than any other means of treatment yet devised, but of course, early diagnosis is the greatest element for success in the management of all forms of cancer.

**Dr. Wm. H. Bailey:** Subsequent report on the case of Dr. Blesh's service of Chorin-Epithelioma.

A few meetings ago we reported the gross and microscopic findings in a case of chorin-epithelioma which had a vesico-vaginal fistula five months after hysterectomy. In a recent report from the patient she states that the repair for the fistula had held and that at the present time, which is two months after the repair was made, she has no evidence of the trouble.

**Report of a Case of Fistula-in-ano Simulating a Sarco-coccygeal Cyst. (Service of Dr M. E. Stout.**

Case No. XXX Mr X--- white age 27, Family History:— Negative.

Personal History: Strong healthy child. Usual diseases of childhood. "Flu" last winter, good recovery.

Present illness: First noticed swelling over coccygeal region in December, 1919. Was slightly tender but no severe pain. Swelling would last two or three days, then break down and discharge a small amount of pus. Swelling would then go down and lesion heal for two or three months, then occur again. Last recurrence about a week ago.

Physical Examination: Chest and abdomen negative. A small tumor found over coccygeal region about 5 Cm. from anus. Swelling had smooth regular outline, firm to tough, slightly tender on deep pressure, no redness or fluctuation.

**Operation:** Complete resection of entire tumor and fistulous tract closed without drainage.

**Gross Examination:** The tumor mass measures 2X3X1.5 Cm. Was of firm consistency and covered with skin which had a slight scar in its central portion. Cut with increased resistance. Center of mass was composed of firm fibrous tissue, in one portion of which was very

minute area of softening and cyst formation. No free pus was found.

**Microscopic Examination:** Sections showed rather dense fibrous tissue thickly infiltrated with polymorphonuclear leucocyte and small round cells. No epithelial or other tissues were found within tumor.

The sacro-coccygeal region being a frequent location of the teratomatous tumors or dermoid cysts, we had rather expected to find some of the structures as epithelium, hairs, cartilage, bone etc., that are frequently present in these tumors. None of these tissues being found, we must consider the possibility of this tumor being simply the inflammatory reaction around a fistula in ano which had a rather higher opening than usual, instead of what is classed as a true sacro-coccygeal cyst.

**Dr. D. D. Paulus:** Case of Dyspnea of Hysterical Origin.

Patient: male, age 32. Farmer by occupation. Had measles, mumps, pertussis during childhood. Influenza in January 1920. Attack was not severe. Lasted about ten days. Patient was not sick enough to remain in bed, but laid around. Following this attack suffered from insomnia, which has continued until the present time. Has always been healthy up to present illness. Father of two healthy children

Present condition began in July 1920, with paroxysmal attacks of dyspnea but since past four months dyspnea has been continuous. Position does not effect condition but it is worse at night. No pain, no wheezing, appetite good, bowels regular. Lost 20 pounds about to July 1920, but has since then regained his weight. Had an abdominal operation shortly after dyspnea began in which appendix was removed by the physician but this has not given him any relief at all, so far as patient can tell. Has had no fever and has been able to do some work every day since illness began.

Physical examination shows well nourished young man. Physiognomy not that of suffering. Dyspnea disappears when patient's attention is distracted from himself. Temperature 98.2 Pulse 78. Pupils react to light and accommodation. Throat negative. Teeth several filled molars but teeth otherwise in good condition. Glandular system negative except post cervicals slightly palpable, epitrochlear palpable. Chest and heart negative. Abdomen, liver and spleen not palpable, negative except for scar of previous operation. Reflexes corneal anesthesia and complete pharyngeal anesthesia. Patellar, cremasteric, etc. normal, no Romberg, coordination perfect. B—P 130-70.

Urine analysis 10.28, Acid reaction, albumen and sugar negative. Small amount of

Indican. Microscopic negative. X-Ray of chest and heart negative. Wassermann test shows 4 plus positive with cholesterin antigen but negative with alcohol and acetone antigens. This test was repeated with same findings.

During his stay in the hospital for diagnostic work, the fact was ascertained from his father that the mother had been in the asylum for one year for mental trouble. The patient was placed in a room with another patient to detect malingering because it was thought he might try to continue to simulate disease if a nurse was constantly present. At the end of 24 hours the other patient reported that the hysterical patient had not suffered from dyspnea except when a physician or nurse entered the room. During his three days stay at the hospital patient stated he had not slept a wink, altho the nurse and other patient reported that he had slept all night.

The relatives were informed of his condition and agreed that they had suspected him all the time. Psycho-therapeutic treatment was advised but patient left hospital on third day. I do not believe we have sufficient clinical evidence for a diagnosis of syphilis in this case, altho a positive Wassermann was obtained with a cholesterin antigen. I am going to ask the laboratory people to explain the discrepancy with the various antigens.

#### A. E. Light

The thing that disturbs me most in my Wassermann work are the changes in blood from time to time and the difference in reports that go out from different laboratories on the same blood.

The article which I will give a resume of this evening, gives me a great deal of comfort and in the main coincides with our experiences.

This article was written by four New York men who were troubled with the same things. The article covers a series of 12,000 cases and extends over a period of five years. They give three main causes for conflicting reports leaving out of consideration errors of technic. 1st, The type of antigen used; 2nd, the method of fixation; and 3rd, allowance for natural amboceptor. They advocate that all clinicians should familiarize themselves sufficiently with the Wassermann technic to be able to interpret reports intelligently, and maintain that the type of antigen used should be reported. For instance, there are three types of antigen used; namely, Cholesterin, Alcoholic and Acetone insoluble. Of these, the Cholesterin is the most sensitive and will "catch" more positives than the others; the Acetone is the next sensitive, while the Alcoholic is the least sensitive. It can readily be seen that if one laboratory uses the cholesterin only, while another uses the alcoholic only, one

may report a positive while another reports a negative result. If the type of antigen is reported, then the physician trained to interpret results may more intelligently weigh results. Of course, the safest way is to run all three antigens, which we do. Secondly, there are two types of fixation, the water bath and the ice-box method. There are more positives by the latter method than the former and here again, unless the method used is reported, there may be a difference in reports from two laboratories. Third, a certain percentage of bloods have sufficient "natural amboceptor" to change a positive into a negative if the titrated dose is used so where one laboratory allows for natural amboceptor and another does not, there may be again a difference in reports so this factor should be taken into consideration in the interpretation of reports.

It is a well known fact that a case which is clinically an old syphilis may be a negative Wassermann; also well known that a certain percentage will change to positive under treatment. This observation led us to the use of the provocative test which has not proved of expected value. Another type of unexplained fluctuation of sudden changes from negative to positive and vice versa with no relation to treatment. Isolated cases of this sort could be attributed to errors of technic but repeated cases caused this laboratory to check with other laboratories with the same result in the majority of cases.

It is the opinion of these men that if tests were made on bloods more frequently, say one a week that there would be a much larger percentage of these changes.

There are a number of tables of statistics given in this article which I will not take the time to give but I do find on the whole this to be a most intelligently written and helpful article.

#### RADIUM EMANATIONS IN TREATMENT OF GOITER

Wallace I. Terry, San Francisco (*Journal A. M. A.*, June 15, 1921) inserted eight tubes of radium emanations, representing 10 millicuries, in the case of a patient with an extreme degree of hyperthyroidism with exophthalmos. He has employed a similar procedure in ten other cases. The dosage of emanation has been reduced to 6 or 7 millicuries and is contained in about six minute capillary tubes. The technic is simple. Under local anesthesia, a spinal puncture needle of small caliber, with an emanation tube loaded in the hollow needle, is introduced into the thyroid. The tube is pushed out of the needle by an obturator slightly longer than the needle. This procedure is repeated until all the tubes containing radium are deposited in various parts of the thyroid gland. The emanations thus act from within the goiter and tend to inactivate it and prepare the patient for operative treatment should it be deemed advisable.

# THE JOURNAL

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### EDITORIAL

#### THE PHYSICIAN IN WAR ON CANCER

The reports emanating from the cancer research laboratories make a very interesting reading. It produces in us sensations not unlike that which was felt during the World War when we read the bulletins describing the struggles of the liberty loving people against a common foe.

It appears that the lines of defense are being tightly drawn, and that victory is possible in the near future. More and more we are learning about the nefarious practices of the despicable enemy. As on the picture screen the rehearsals of the imitations of battle and intrigue of the enemy was made more vivid, so in the laboratory the strategists have imitated, and cancer is being produced, and reproduced apparently at will (See Jour. A. M. A. May 21, 1921, Page 1404).

Deserving of not much if any, less credit than the laboratory worker is the clinical investigator. Instruments of destruction are being made more accurate and new methods of defense are being perfected. Radium, though

held by none as a cure all, is being made to perform wonders as an adjunct in the line of defense. Its possibilities are not as yet fully known.

But as during the World crisis the one ever recurring question of what was the cause of the war was unanswered, so in cancer the question of etiology remains unsolved. Many theories as to its cause have been advanced. Some remain as apparently logical while others have been entirely discarded as untenable. As playing an important role in the incidence of cancer, heredity was until recently held in great respect. It has been definitely proven that heredity plays only a small part—if any at all—worthy of notice. That which in the past was considered as proof of heredity as a factor in the incidence of cancer was most likely the influence of environment misinterpreted.

Only a few years ago it was believed that scar tissue in the cervix uteri resulting from laceration which, even though clinically otherwise was unimportant, constituted a strong factor in the causation of cancer of the uterus. Many "repairs" were made solely for the purpose of prophylaxis. Subsequent observations have not shown that these patients are less liable to have cancer than those who have not been operated.

Casting a gloom over the situation is the fact that cancer is on the increase. And this gloom is only slightly dispelled when it is noted that the percentage of cures has gradually improved in the last decade. But there is no cause for alarm in the fact of the increase of cancer when the cause therefor is considered. The explanation is to be found easily. A larger percentage of the human race are living to reach the cancer age than formerly. It is proof of the victories won over the infections and other preventable and curable diseases.

In the struggle against cancer the physician has his part to play no less than the duties assumed by the investigators. He should utilize to every advantage the fruits of the progress which have been gained. Understanding as he does all that has been learned of the enemy's methods of action, he should spread the propaganda of hope, and at the same time caution against the intrigues of the enemy.

There is a time when every cancer is curable if accessible. That time is not to be measured with exactness, but it begins with the beginning of cancer. It ends whenever the cancer is developed to that extent that its complete removal or destruction by some method is incompatible with life. When, therefore, there is a suspicion that cancer is developing the physi-



cian will use every means at his command as rapidly as he consistently can to ascertain the facts, not stopping short if necessary of excision and microscopical investigation while the patient is on the table and ready for whatever is indicated in order to provide a cure. To act otherwise would cause him to be branded as a slacker. If, for instance, he should say to the mother that the painless, solitary lump in her breast was of little or no consequence, and advise no more than an external application and occasional "watching" he would be negligent of his duty in the superlative degree. It is by such advice that mothers go to premature graves, and children lose that which for them is the greatest loss in the world; and the physician plays into the hand of the enemy

—*Horace Reed.*

#### DR. HUGH SCOTT: ASSISTANT SURGEON GENERAL

There can hardly be an exception worth while, and that one will surely be found to be nursing some grudge over Scott not having given him what he thought he ought to have had, voicing anything except keen, personal, glad satisfaction that Our Own "Hugh" has been signally honored by receiving appointment as Assistant Surgeon General, U. S. Public Health Service, with headquarters in Washington. We believe all medical Oklahoma and several thousands of disabled soldiers, their families and friends and well-wishers will say Amen to the appointment and harbor the belief that this is the beginning of a better day for the men who long before should have received more adequate attention and care from a forgetful government. It goes without saying that shameful neglect is entirely too mild a characterization of the experience doled out to these deserving men. The writer has from the first been fairly acquainted with the efforts of Dr. Scott to make something of the chaotic condition allowed to grow up as a result of the various congressional acts having for the end proper care of the men. Scott at all times had to labor under disgusting restrictions, had to keep his honest opinions of the shilly-shallying and childish efforts of incompetents with which the Public Health Service is honeycombed, to himself. It is to his credit, however, that he roundly "cussed" those in power in Oklahoma who could have, but did not make provisions for these men. The last Legislature was more than provoking in this respect, and the provocation came from so-called legislators, better denominated "braying asses" than lawmakers, when it came from those who pride themselves as having been in the service; therefore, to the initiated, fitted to properly say what should be done, then the last straw was broken. Had

the efforts of Scott been ably augmented instead of obstructed with whinings and criticism, Oklahoma today would have had one of the great divisional hospitals, but "it was ever thus", our "brayers", simply because "my town" could not have the hospital or believed it could not have it, and the belief was well placed, for ex-service men are not to be the political football of any set of men, and certainly are not to be placed in just any little old cross roads village; because of Senator So and So. We lost the hospital and all chances of ever having even a small part of the establishment has probably gone forever. We lost it, too, when Oklahoma had a better argument to place before the Congress than probably any other State. The records will show that we sent our first many thousands of men to camps at a per capita cost so ridiculously low that it remains a matter of wonder until investigation discloses that every board member concerned rendered his necessary service without a cent of compensation. At the same time and under the same National Act, states like New Jersey and others filed a Federal bill for something like sixteen or seventeen dollars per capita. This argument alone would have had more weight than any other, but it was not to be. Instead of that we had "protests" from everywhere. "There are plenty of hospitals a'ready" — there were no such thing. "It will take two years to build them". What if it did? The two years could have been probably shortened, just as we have a habit of shortening things when emergency demands, provided the bickers on the side lines attended to their own selfish affairs. The whole story is one of extreme disgust and brands too many of our believed "prophets" as nothing more less or than selfish men without a vestige of right to opinion or respect.

We have this one gleam of satisfaction, and to the friends of Hugh Scott it looms large. Ex-Servicemen may hope for a better day. Despite reported whitewashing of the Houston Hospital? by a congressional committee, who is said to have found it fit, we predict it will soon be either really given a needful coat of real whitewash along with other antiseptics. Some of its "red-tapists" have already walked the plank of proper oblivion and no longer may sit and plague honest efforts to accomplish results, and those who remain may as well know that men who do things do not sit sleeping in emergency, neither do they close up the office at Saturday noon if they are to make a mark worth while in this particular governmental service.

Oklahoma hands you her best greetings Dr. Scott. If we may aid you, the aid is yours to our best ability upon slight notice.

## THE LEAGUE OF NATIONS PROVISIONAL HEALTH COMMITTEE.

Announcement of appointment of this committee, which is said to have been made in attempt to meet the difficulties created by refusal of the United States to permit the *Office International Hygiene*, at Paris, to cooperate with the proposed health organization of the League, is made. It contains such well known names as those of Calmette, Havelock, Carriere, Bernard, etc., but unfortunately, the Nation whose representative did more than any other man to make the League a struggling possibility for international good, has no representative. The absence of any American name is noticeable-also regretfull. However we have an abiding faith in the good sense of the people. We believe that eventually some sort of international agreement-call it what you will, "League" or not, will be consummated. If it is not done, at this time, now, upon what great students of the situation mark as the psychological moment, then God only may stand between civilization and destruction.

The object of this committee will be to act as a connecting link between health authorities of all countries. a clearing house for information as to menacing health conditions, to form a sort of general staff when epidemic threatens to overan a number of countries, to coordinate efforts of the Red Cross and to cooperate with the International Labor Office for the protection of the worker against sickness. Surely there can be no partizan objection raised to these laudable ends.

### NOBLE COUNTY MEMBERSHIP

It is with extreme regret that the Secretary's office has to acknowledge the irritating as well as inexcusable blunder upon the part of those concerned by which the entire list of members of Noble County was omitted from the June Roster. The names listed below convey the information as to the membership, and it goes without saying that each and every one of them have a good grievance against the Secretary's office. However, this would not be complete did it not also convey the information that surely each of them must know that the work of our office is not exactly a bed of roses, that mistakes do occur despite every known safeguard being extended to prevent them, and especially do they occur in the handling of proper names. How this one "boned" through, we are unable to explain, beyond the fact that the fellow who said he had checked, rechecked, compared and recompared, was simply suffering from a case of "hiatus mentalis", how they were "biting" on the Illinois or just dreaming "In the Spring a young man's fancy etc". That does not undo the matter, but it has given us an opportunity to experience somewhat a rarity—not one of those gentlemen voiced a single kick or complaint—and for that we are more than grateful; that part of the affair places us in the column where we stand to do anything for them individually or collectively hereafter, as well as placing them in the unusual niche reserved for those of our friends who permit us to abuse them in such manner, realizing our shortcomings and applying to them a kind mantle of generous forgiveness.

### NOBLE COUNTY

Brafford, Samuel F. Billings

Cavitt, Robert A.	Morrison
Coldiron, Daniel F.	Perry
Dorough, John L.	Perry
Gains, Samuel H.	Lucian
Kuntz, Lambertus	Perry
McQuown, Harry	Red Rock
Owen, Benj. A.	Perry
Renfrow, Thos. F.	Billings

Again we assure you, we are yours on demand.

## FOR THE PROTECTION OF OKLAHOMA PATIENTS

Experience of many Oklahoma physicians who have had occasion to send their patients to various resorts has been that often they fell into the hands of incompetent or dishonest physicians. In order to acquaint you with the best talent obtainable, we list below names of men who will either treat any case sent them or refer it to the proper person in order that no advantage be taken of the unfortunate by the charlatan.

Pueblo, Colo.	Dr. Philip Work
Colorado Springs, Colo.	Dr. A. C. McGruder
Denver, Colo.	Dr. David Strickler
Hot Springs, Ark.	Drs. E. A. Purdom and W. T. Watton
San Antonio, Texas.	Drs. Homer T. Wilson and W. B. Russ

## PERSONAL AND GENERAL

Dr. W. W. Rucks, Oklahoma City, visited Vanderbilt clinics in May.

Dr. C. E. Bradley, Mountain View, visited Philadelphia clinics in June.

Dr. J. R. Preston, Weleetka, visited Chicago clinics in May and June.

Dr. G. W. Ramsey, Poteau, has returned to his former location, Quinton.

Dr. J. H. White, Muskogee, will visit Boston clinics during the summer.

Dr. E. B. Mitchell, Lawton, visited the old folks at home in Indiana recently.

Dr. J. C. Stevens, Drumright, visited New Orleans clinics in June and July.

Dr. H. W. Coleman, Dewar, is attending clinics in Boston and Philadelphia.

Dr. F. H. Nowlin, Oklahoma City, has recovered from a severe attack of pneumonia.

Dr. and Mrs. M. M. Wier, Oklahoma City, are visiting in Cincinnati and Chicago.

Dr. L. A. Mitchell, Frederick, will spend the summer in Chicago doing special work.

Dr. G. A. Wall, Tulsa, has moved his office from Mayo Building to 607 Palace Building.

Dr. B. F. Johnson and family, Fairview, visited relatives in Alabama and Tennessee in June.

Dr. D. W. McCary, Holdenville, has been attending eye, ear, nose and throat clinics in New Orleans.

Dr. Orange W. Star, Drumright, has returned from post-graduate work in the University of Chicago.



Dr. W. S. Cherry, Alva, has purchased a building for the purpose of establishing a hospital in that city.

Pawhuska has ordered plans submitted for construction of a \$70,000.00 city hospital. All funds are available.

The Hardy Sanitarium, Ardmore, announces that it has secured radium valued at \$7,200 for use in the institution.

Dr. W. B. Pigg, Okmulgee, is taking a much needed vacation announcing, that his disposition will be much better when he returns.

Mrs. Thos. H. Sturgeon, representing the state health department, at Tulsa, has been ordered from that place to take up duties elsewhere.

University Hospital quarters devoted to care of ex-soldiers recently received four electric fans as a gift from the Oklahoma Gas and Electric Company.

Dr. E. C. Wilson, Alva, has inaugurated steps toward the erection of a hospital in that city. He will be joined by several Alva physicians in the venture.

Dr. and Mrs L. J. Moorman, Oklahoma City, remained in Boston after the A. M. A. meeting, to which Dr. Moorman was a delegate, visiting relatives in the Hub.

Dr. Leonard Ryan, Sulphur, shot and instantly killed Ernest Daughtery at Sulphur June 25. Press dispatches state the matter arose over a \$5.00 doctors bill.

Dr. Glenn Francisco, Enid, has been appointed county superintendent of health for Garfield County, succeeding Dr. Walton McKenzie who retires on account of ill health.

Okmulgee Members of The Academy of Medicine have appointed a committee to organize and put in execution plans for establishment of a clinical laboratory in that city.

Drs. M. P. Springer, Leon Stuart and D. O. Smith, announce the opening of their Diagnosis-X-Ray-Radium Complete Clinical Laboratory at 604 South Cincinnati, Tulsa, Okla.

Dr. A. E. Davenport, Oklahoma City, recently found an infant girl who had been abandoned and left in his front yard. The infant was promptly adopted by Oklahoma City people.

Dr. Leila E. Andrews, Oklahoma City, recently perfected organization of the fraternity Alpha Epsilon Iota, composed of women in medical life. This privilege is only accorded medical schools of Class "A"

Dr. E. G. Sharp, Guthrie, was elected President of the National Eclectic Medical Association which held its annual meeting in Colorado Springs recently. Dr. Sharp was a member of the last legislature from Logan County.

Creek County Medical Society, enjoyed a banquet at Sapulpa June 5th, in connection with their meeting. Drs. C. L. McCallum, and W. P. Robinson, Sapulpa, reading papers. Dr. J. M. Mattenlee, Sapulpa, was toastmaster.

Dr. L. C. Presson, Tulsa, city superintendent of health, has "gone and done it". Tired of unsanitary premises, he recently followed the lead of Admiral Sims and ordered his immense clientele to either clean up or take to cover. They cleaned.

Dr. Melvin Fry, Slick, is contesting the validity of a city ordinance demanding that he pay an occupation tax. To bring this about Dr. Fry underwent arrest, received fine, refused to pay then gave bond and appealed the matter to the District Court.

Dr. J. S. Fulton, Atoka, and Miss Arlie Brain, McAlester, slipped a surprise over upon their friends during the annual meeting in May. Without consulting any of his old friends, Dr. Fulton and Miss Brain were married May 18th. They will make their home in Atoka.

Dr. J. H. Laws, Broken Arrow, is recovering from a serious surgical operation performed at the Baptist Hospital, Muskogee. Dr. Laws was critically ill for several days, but "made the grade" in splendid shape and is receiving the congratulations of his friends on his narrow escape.

Tulsa Physicians promptly organized into suitable sections immediately after their unfortunate race riots in June, for the purpose of rendering aid to the victims, as far as could be extended. It is said their services were continuous, without rest, night and day until the tension was relieved and affairs returned to normal.

Doctors Needham, Oklahoma City, who it is said were "Cancer specialists", "removing cancer without knife or caustic", are called to answer a \$50,000 damage suit in Oklahoma County, the plaintiff, a woman, alleging that a plaster was placed on her hip, which ate away portions of that anatomical necessity, disfiguring her face to the extent of the above mentioned amount. She also alleges she had no cancer, but a "blood wart".

McCurtain County Medical Society enjoyed an unusual treat when they were invited guests of Dr. and Mrs. C. Denison, Idabel, who tendered the visitors a barbecue dinner at their country home near Shawneetown. Besides the members present, Drs. L. B. McCusiton, who addressed the meeting, and O. O. Hammonds were present from Paris, Texas and Drs. Wisdom of Broken Bow, Kelleam and Ben Denison, Garvin, enjoyed the offerings. Dr. E. Bayliss of Idabel also read a paper.

Muskogee papers quote the police department as complaining that it was next to impossible to secure the services of a physician at one or two o'clock in the morning to answer a call originating in a well known district of the city. The dear people, of course never heard the doctors call the roll on the deadbeats they had wasted their time upon in making calls to that identical neighborhood. At that the doctor has performed more efficiently in that district than any police administration ever did. Letting the grateful specimens concerned feel the shoe pinch on their own foot will do no harm whatever.

Dr. Jos. A. Patton, Stilwell, advises the JOURNAL of an unusual meeting of the Adair County Medical Society held at Watts, June 1st. In the first place Western and Central Oklahoma physicians who have not visited that part of Oklahoma have no conception of its many attractive features embodied in a wonderfully pure water supply, green covered hills and relative freedom from the hot winds we know so well. To such a center travelled the members where they were regaled with a country dinner of fried chicken, fish and all the concomitants going to make an outdoor affair the success supreme. Papers were read by Drs. J. R. Reynolds, Westville and W. D. Ezell, Watts. The meeting was pronounced a huge success.

Dr. Walter Hardy, Ardmore, has the proud distinction of having been "elected" by votes issued by an Ardmore paper as that city's "Most useful citizen". Truly this evidence of appreciation on the part of ones fellow citizens is a testimonial of which any of us might feel a just pride. The thinking person, upon reflection, must concede that in every community there resides unhonored and unsung a "most useful citizen" in the garb of a doctor. The good he daily does with no hope of reward either in money or the cheers of the multitude, is known only to those intimate with his daily grind. It is a sad reflection that his peculiar position is unappreciated often by the very beneficiaries of his charity and skill.

Dr. O. A. Flannigan, Tulsa, recently told his audience at the Lions Club that "while the time is not immediate, it is nevertheless not far distant when the United States will be unable to have a physician to answer their beck and call in the event of illness". The opening remarks as above caused a sensation among his hearers. He gave as his reason the lack of remuneration, restrictive laws and the impelling necessity of pleasanter tasks offering the doctor peace and plenty instead of turmoil and trouble with unappreciation as the finale. There is no question but what the situation is already alarming in rural districts. Why not allow the Chiropractic and other "practices" to shoulder the burdens? Oklahoma seems to have lately given evidence of its very high regard for gentry of that class "Let the Chiro. do the work".



**Free Venereal Clinics** will be continued, though on a lesser scale according to Dr. J. C. Mahr, who has been appointed to continue charge of the work by State Commissioner Lewis. Oklahoma City, Tulsa, Bartlesville and Muskogee will attempt to continue the work on a restricted scale. The last legislature made no effort worthy of the name to help the unfortunate venereal victim, beyond a pitifully inadequate sum set aside for purchase of insufficient drugs. City and county authorities will be asked to make limited provisions toward support, the Federal government will make what aids it can under the circumstances and by holding the organizations together it is hoped that the next legislature will see its proper duty and act accordingly. The patients concerned will be expected to pay such nominal sums as they can in order to partially meet clinic expenses.

**Physicians Demanding Repeal of the Volstead Act** is the gist of numerous headlines. Likely to deceive the unwary, unposted physicians, this stated attitude of the medical profession should be controverted on every occasion. Many of us do believe the Volstead Act was the creature of accidental circumstances, shrewdly twisted by prohibitionists into their favor at a time when the country was psychologically prepared by great propaganda and exigencies of the World War, but we do not propose to be found in the columns of the liquor prescribing worthies so commonly infesting the Atlantic Seaboard. Their amusing howl for "States Rights" met a very proper laugh of derision. They had their opportunity to sustain or reject "states rights" when a great question of morals was involved, greater by far than even the liquor question. They flatly rejected the idea and many of us of the Southland agree that the decision was for the best, though deprecating many of the unlooked for results. No reputable organization of physicians has or will permit themselves to be used as catspaws in this matter. We do object to being told by fanatics what, how much and when we may prescribe anything, that is the bad feature of the Volstead Act and its proposed qualifying amendments, but we shall not be found aligned against any good legislation simply because certain features may be irksome and palpably unjust. If the entire creation is for the best on the whole we will stand by it, only hoping that as common sense once more assumes the throne of legislation, if it ever does in this respect, the irritating, restrictive, silly clauses, throwing unjust burdens upon the doctor, will be repealed and sensible legislation will prevail. We state that as our principle and that we are not a part of a shady aggregation seeking to use the honored profession of medicine as a wedge to undo that which most of us are glad to see existent.

#### THE TREND OF THE TIMES (From various dry centers)

Doctors, doctors everywhere, and not a prescription to ease a snake-bite. That was the fate of McAlester men during a convention of physicians the past week. The difficulty was that three court sessions—two state and one federal—were in progress, and, well more than 100 defendants already had been convicted on charges of evading anti-hooch laws.

*Chickasha Express.*

And now doctors may write prescriptions for one pint of whiskey for each person, every ten days. This is the latest ruling from Washington. Dry agents claim 35,000, 000 gallons of whiskey were consumed during the past year. Thus it will be seen that while prohibition comes high, it does not prohibit, and the lid is being badly tilted every now and then.

*Coueta Star.*

"An Oklahoma doctor was called into the spavina hills a few days ago to treat a man who had been bitten by a snake. We have not heard whether the man recovered or not, but inasmuch as there is no snake-bite cure in the country any longer we presume he died," reports the Bartlesville Enterprise.

*Oklahoman.*

#### DOCTOR ROBERT S. LYNN.

Dr. R. S. Lynn of Tulsa died in that city after several weeks illness Friday May 27th.

Dr. Lynn was born in Green County, Indiana, December 4, 1864, educated in the common schools of that state, graduating from Gross Medical College in 1898. He had practiced in Tulsa about four years, prior to that practicing at Muskogee, Enid, McAlester, Bartlesville, Oklahoma, at Chattanooga, Kansas. He is survived by a widow, two married daughters and two brothers. Interment was had at Tulsa under the auspices of the Odd Fellows of which organization he had taken an unusual interest throughout his connection of many years with the order.

#### DOCTOR WILLIAM J. TAYLOR.

Dr. Wm. J. Taylor, Fairview, died in that city, suddenly April 26th from heart disease. Dr. Taylor was born in New York, August 12th, 1842, and was educated in Canada to which country his parents moved, later completing his medical education and graduating from the University of Michigan. Early in life he was married, the union resulting in two sons, both of whom with their mother have since died, leaving Dr. Taylor with one grand son. Moving to Oklahoma in 1904, at the time of his death he was the oldest active practitioner of medicine in the State. He was member of the Episcopal Church, singing in the choir for 35 years. Dr. Taylor was finely educated in the sciences pertaining to medicine, an old fashioned fluent scholar of Greek and Latin and took more than casual pride in keeping those things of the dead past a useful adjunct to his daily life. He was a member of the Masonic order, which organization tendered the last rites of burial. His passing is mourned by many sincere friends and his life bears witness of untold good deeds rendered the needy and which the physician more than any other is given opportunity to aid. By reason of his lack of relatives he was in position to do great good to the needy of his community and it is said that none were ever turned away unrelieved were it in his power to give relief. The State loses a fine, respected citizen, who has left the mark of great charity as a fitting monument to a useful career.

#### NEW BOOKS

Under this heading books received by THE JOURNAL will be acknowledged. Publishers are advised that this shall constitute return for such publications as they may submit. Obviously all publications sent us cannot be given space for review, but from time to time books received, of possible interest to Oklahoma physicians, will be reviewed.

#### TRAUMATIC SURGERY

(2nd Edition)

Traumatic Surgery. By John J. Moorhead, M. D., F. A. C. S., Late Lt. Col., Med. Corps, American Expeditionary Forces; Professor of Surgery and Director Department of Traumatic Surgery N. Y. Post Graduate Medical School and Hospital. Second edition, Entirely Revised. Octavo of 864 Pages, with 619 Illustrations. Philadelphia and London: W. B. Saunders Company, 1921. Cloth \$9.00 Net.

This work was reviewed June 1921 see page 140, that issue.

### BOOK REVIEWS

#### BOOTHBY AND SANDIFORD'S METABOLIC RATE DETERMINATIONS.

By Walter M. Boothby, A. M., M. D. and Irence Sandiford, Ph. D. Section on Clinical Metabolism, The Mayo Clinic, Rochester, Minn. Octavo of 117 pages, Cloth, \$5.00 net. W. B. Saunders Company, Philadelphia 1921.

This is another publication from the prolific Mayo Clinic. After a short history of the development of the subject of basal metabolism and description of the direct and indirect methods of determination of the rate, the authors launch into a description of the apparatus and technic in use at the Mayo Clinic.

On reading this manual one is struck with the meticulous care and attention to detail considered necessary for acceptable results. One wonders how an institution or an individual not in command of ample funds and laboratory workers trained to this specialty and able to devote much time to it can look for determinations worthy of consideration.

*Brown.*

#### A Primer For Diabetic Patients

A Primer for Diabetic Patients. A Brief Outline of the Principles of Diabetic Treatment, Sample Menus, Recipes and Food Tablets. By Russell M. Wilder, M. D., May A. Foley, and Daisy Ellithorpe, Dietitians, The Mayo Clinic. 12mo of 76 pages. Philadelphia and London: W. B. Saunders Company, 1921. Cloth, \$1.50 net.

The contents of this little volume were originally mimeographed to be placed in the hands of the diabetic patients at the Mayo Clinic. The authors acknowledge Joslin's "Diabetic Manual" as their source of inspiration. In addition to directions for general hygiene for the diabetic menus are given for patients with carbohydrate tolerance varying from below 40 grams to over 100 grams.

B. H. B.

#### OFFICERS OKLAHOMA STATE MEDICAL ASSOCIATION, 1921-1922.

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Meeting Place, Oklahoma City, May 1923.

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\*This list is published bi-monthly.

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Meetings held on first Tuesday of January, April, July and October. Oklahoma City. Do not address communications concerning State Board examinations, reciprocity, etc., to the Journal or to Dr. C. A. Thompson, Secretary, but to Dr. J. M. Byrum, Shawnee, Secretary of the Board.

# THE JOURNAL

OF THE

## OKLAHOMA STATE MEDICAL ASSOCIATION

VOLUME XIV

MUSKOGEE, OKLAHOMA, AUGUST, 1921

NUMBER 8

### THE PROBLEM OF THE GENERAL PRACTITIONER WITH SUMMER BABIES

BY R. K. PEMBERTON, M. D.  
MC ALESTER, OKLA.

Of the many problems arising in general practice, that of successfully piloting the child through his second summer is one of the greatest, and, needless to say, this is due to the various disturbances of the digestive tract.

There are many reasons why the child in his second year is especially susceptible to digestive derangement, the greatest of which is because of its age and the consequent lack of development of the digestive organs to the extent of being able to digest the various foods which are usually permitted at this time.

The three most important factors in the etiology of disease have been set down as, heredity, food and environment, and this is especially true of intestinal diseases of second year babies.

It is not unusual to see infants having the same food and living under the same hygienic conditions, yet differing greatly in their digestive powers. This cannot be explained except upon the theory that each child by inheritance has weak or strong digestive organs.

There is no doubt but that bad hygiene, such as poor air, improper clothing, insufficient sleep, exposure to heat and cold and excitement of any kind may and often does, by lessening the digestive powers, invite derangement of the digestive system. But chief among these predisposing causes, in my opinion, is the excessive heat of our summer, which so lowers the vitality of the second year child, which at this age is, very likely, getting a mixed diet poorly adapted to its digestive power.

With this lowered resistance present let the baby be given food improper in character or amount and the physician has on his hands a condition which demands his most careful consideration because of the fact that the mildest cases of bowel trouble may within a very short time become dangerous. The whole problem lies in adapting quantity and quality of food to the digestive powers of the child.

As we before stated there is a great variation in children. Each case must be studied separately and the food ordered which is best suited to the case in hand. However, in doing this one is guided, more or less, by certain basic principles to be mentioned later.

In addition to the careful study of heredity, hygiene and food, the physician has to consider the role that various bacteria play in the etiology of these cases.

It is not my purpose to discuss in any extensive manner the question of foods and bacteria in connection with this subject; because there are so many theories advanced that one can be sure of only one thing, and that is, that there is yet much research work to be done along this line before the whole truth is known.

We know that, in health, the alimentary canal contains many bacteria which live upon the contents of the bowel and that their presence is necessary to proper intestinal digestion. It is only in the infectious diarrhoeas that bacteria attack the tissues of the host, but of that we shall speak later.

According to Dunn, "Disturbances of digestion results from lack of balance between the digestive power and the food given, with or without the added factor of abnormal bacteria fermentation; and the changes produced by the lack of balance, with or without fermentation are, for the most part, chemical."

For the purpose of presenting the subject of digestive disturbances in a brief and simple way I have adopted the classification as made by Morse and Talbot and used by The Harvard Medical School, which is as follows:

- (1) Indigestion from excess of food.
- (2) Indigestion from excess of a food element
  - (a) Fat
  - (b) Carbohydrates.
  - (c) Protein.
  - (d) Salts.
- (3) Indigestion with fermentation.

To this I want to add: "Infectious Diarrhoea" for I believe that is the only name suitable for that serious condition characterized by a bloody mucous diarrhoea and certain other toxic symptoms.



In a paper of this length I can hope only to present a part of these most common conditions and the symptoms by which we may recognize them; also the manner in which the general physician may, in my judgment, handle them best.

In a general way, the most common symptoms of gastro-intestinal disease are; vomiting, abnormal stools with or without blood and mucous, diarrhoea, fever, loss of weight and toxemia. The symptoms and the clinical picture varies, of course, according to the pathology present.

I wish now to present,

**PROBLEM NUMBER 1:** Indigestion from excess of food.

This may be acute or chronic.

In the acute form the leading symptoms may be only vomiting without fever or diarrhoea; or, there may be only a diarrhoea—ten to twelve stools in twenty four hours, acid or alkaline in color, brown, yellow or white, there may be a small quantity of mucous if the condition lasts several days, also a slight fever. The duration depends upon treatment.

In cases where vomiting is the leading symptom, starvation for twentyfour hours with fractional doses of calomel and if vomiting continues, sips of hot water in which has been dissolved a small pinch of Sol. Bicarb. is probably the best treatment.

Where diarrhoea is the leading symptom castor oil is preferable to calomel but in either case only boiled water is allowed in the stomach for the first twentyfour hours. Then put the baby on a milk diet prepared as follows: one part of whole cows milk to two or even three parts of boiling water, letting the milk and water boil together for three or four minutes, add no sugar. Keep cool and feed, according to age, at intervals of about three hours.

The chronic cases are best handled by diminishing the quantity of food, or, if necessary, placing them on the milk and water diet and increasing the strength of the milk and water as rapidly as possible and also adding the sugar earlier than in the acute cases.

**PROBLEM NUMBER 2:** Indigestion from excess of fat.

This is usually manifested by vomiting, soap stools, stools containing soft fatty curds and loose green stools with possibly some mucous. In many cases of two year children solid food has been pushed too rapidly on the child and repeated food injuries to the intestine finally leads to an intolerance of fats which is shown by a slight fever, restlessness and failure to gain weight.

This condition is relieved only by withdrawing fats from the diet and substituting sufficient

carbohydrates to supply the caloric needs of the child. This is usually done by feeding barley gruel for a few days, or, what is perhaps better, skimmed milk to which has been added dextri maltose, gradually returning cream to the milk as the symptoms improve.

A gruel diet should never be continued for longer than a few days. The milk and water diet will usually change a diarrhoea from the fermentative type to the putrefactive type and then the gruels are given to starve out the putrefactive bacteria.

After the stools become firm and of a brown color then the diet may suddenly be changed to boiled milk and water, without sugar, for a few days, and then sugar added to supply the necessary carbohydrates.

**PROBLEM NUMBER 3:** An excess of carbohydrates in the food.

This causes an increase in bacterial fermentation and consequently gaseous distention of the bowels with an excess of acids in the intestinal contents which irritate the mucosa of the gut and sets up a diarrhoea. In this condition if the case is acute we have vomiting, if chronic, a progressive loss of weight. The stools, as before stated, are strongly acid and very irritating to the buttox. In older children the principle symptoms are loss of appetite, gaseous distention of upper part of small bowel abdominal pain and nausea, often the child has a pallor and appears weak, has a cough, is nervous and restless at night—the symptoms resembling that of a child suffering from worms. In the case of older children suffering from an excess of carbohydrates in the food, often caused from eating too much sweets, the stools will be clay colored and contain some mucous.

In treating these cases it is imperative that sugar and sweets of all kinds be cut out of the diet, and starches, if at all given, should be limited.

In smaller infants, castor oil followed by a few hours rest from all food, allowing only water, then placing him on albumen or protein milk, prepared after the manner of Finkelstein, is the proper course of treatment.

In older children, the diet should be milk, cereals without sugar, meat soups and green vegetables.

**PROBLEM NUMBER 4:** Indigestion from an excess of Proteids.

Protein is necessary to the growth and even the life of the child for it is from this food that wastes of the body are replaced and new tissues are built up.

The caloric value of proteins is about the same as carbohydrates but only one-fourth to one-third is given off as heat, therefore it is not an economic food as a source of energy.

An excess of protein causes intestinal disturbances largely because of the inability of the stomach to take care of large amounts of casein. The curds found in the stomach are often tough and hard to digest and this causes an increase of peristalsis and in many cases vomiting. In breast fed infants the vomitus is not sour and the curds are not so large or tough as in the case of infants fed on cows milk.

Colic and flatulence are often present and the stools are usually alkaline and are not irritating to the buttox. In artificially fed infants getting too much protein food the vomitus contains large curds which are tough and leathery, the odor is slight or may be musty or foul, reaction alkaline. The stools are usually green but may be yellow or brown and often show a shiny surface. The casein curds passed with the stools have the same color on the outside as the other portion of the stools but if these curds be broken open the inside shows a clear white color.

This has sometimes been called a putrefactive diarrhoea to distinguish it from the fermentative diarrhoea which is caused, as we have seen, from an excess of carbohydrates.

In this putrefactive diarrhoea due to excess of protein the indications are to feed starches and carbohydrates.

This we do largely by the use of gruels. Dennett says, "it is sometimes very hard to distinguish between fermentative and putrefactive diarrhoea. The onset and fever are about the same and, in addition to the difference in the stools, there are two main points of distinction; the fermentative diarrhoea occurs nearly always in infants which have been fed a high sugar or starch diet, whereas the putrefactive diarrhoea occurs in children who have had strong milk mixtures with little or no sugar and starch" "If in doubt treat first as a fermentative diarrhoea by giving the boiled milk and water mixture, one part milk to two parts water without sugar. If the diarrhoea does not respond to this food then the case is one of putrefactive diarrhoea and a carbohydrate diet should be given".

We have now come to the last problem which I shall present.

#### PROBLEM NUMBER 5: "Infectious Diarrhoea"

This is the most severe and dangerous bowel trouble of infancy and early childhood. It is distinctly a bacterial disease, the bacteria not alone being found in the intestinal contents, as in fermentative diarrhoea, but attack the lining membrane of the intestinal walls and even invade the circulation. It is in these cases, from the absorption of certain toxic products the child gets a toxemia. In this form of bowel

trouble the disease is no less a true infection with local lesions in the bowel than is typhoid fever or tuberculosis of the bowels.

We should bear in mind that any one of several kinds of bacteria, such as the various strains of dysentery bacilli, gas bacilli, streptococci etc. may be responsible for this form of bowel trouble. It is usually impossible to make a diagnosis of the exact bacterial condition without a microscopical examination; but it makes little difference which bacteria are causing the trouble for the symptoms are very similar. The most important symptoms are; diarrhoea—the stools containing mucous and blood, fever, toxemia and rapid loss of weight. There are many other symptoms but these are the most important. Only one other condition simulates, in symptoms, this disease and that is intussusception.

It is not my intention to go into detail as to symptoms, pathology etc., but to try to bring out the fact with as much emphasis as possible that this is an infectious disease and that the patient must be supported and tided over the crisis until the infection is overcome.

Some authors claim that it makes little difference as to diet and that we should feed as we would in any other acute infection. The two principal theories as to diet, as mentioned by Dunn, are directly opposed. One theory is that the diet should be high in sugar and low in protein. The other, that it should be high in protein and low in sugar. Others claim it should be low in fat while still others feed albumen water, beef-juice and whey.

It has been shown that most of the bacteria causing infectious diarrhoea, except the gas bacillus, when living on carbohydrates produce harmless products, in the absence of carbohydrates they attack the protein and as a result toxic products are formed. Opposed to this are those who believe the diet should be largely protein on account of the danger of sugar intoxication and that the indigestibility of the casein of cows milk has been exaggerated.

One must be governed by the character of the stools in each case and feed that particular food which the patient seems best able to digest.

An exception might be made where the infection is due to gas bacillus, in which case it has been found that the lactic acid bacilli inhibit the growth of the gas bacilli and are therefore, theoretically indicated. In looking up the literature on diet in these cases one finds a great diversity of opinion. I shall briefly present the plan which in my experience, we have found to be most successful.

This plan follows closely that set out in "Dennetts Simplified Infant Feeding", a book which should be in the library of every general practitioner.

In the beginning of the attack, if vomiting is present, fractional doses of calomel followed by milk of magnesia. If no nausea or vomiting give castor oil instead. Only water for first twenty-four hours, then barley gruel for a day or two, after which the baby is put on the water and milk diet as mentioned in problem 1.

If the stools do not improve rapidly Dennetts fourth method of treating diarrhoea should be substituted. This is Finkelstein's protein milk which, according to Dennett, is indicated in the following conditions.

- (1) Simple Intestinal Indigestion and fermentative diarrhoea, especially if severe and of long standing.
- (2) Dysentery, and severe infectious diarrhoea.
- (3) Any case of diarrhoea in which other methods, after thorough trial, have failed.

In my hands we have seen some splendid results from this form of diet and we cannot commend it too highly. The original formula of Finkelstein's protein milk may be found in "Dennetts Feeding", Page one hundred forty-six (P. 146). It may also be bought on the market in the form of curds to which butter-milk may be added.

In using protein milk one should not let the child stay on it too long. After the stools are clear of mucous and blood the boiled milk and water mixture should be substituted, without sugar. Then in a few days the milk may be increased and cane sugar gradually added.

Now, gentlemen, I have not gone into the medical treatment of these conditions for the reason that that part of the treatment is only symptomatic, and as I am quite sure, secondary to proper diet.

In conclusion, I want to caution against the indiscriminate use of astringent and other mixtures which are often injurious to the child's digestion. Dovers are frequently necessary for the control of tenesmus, pain, excessive peristalsis and restlessness. An occasional colonic irrigation as indicated, but not as routine treatment. Absolute rest, supportive measures, proper control of fever, the diet as outlined above, together with intelligent nursing, will greatly lower the mortality rate in these bowel diseases. I thank you.

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#### Discussion

*Dr. A. L. Soloman, Oklahoma City:* I want to congratulate the doctor on his paper. The paper was very excellently gotten up. In his treatment I was very glad to see him modify that medical treatment, in diarrhoea. I think it has a very small part outside of mere milk treatment. Regarding the fermentative diarrhoea, I noticed in a recent article in the American Journal on Diseases of Children by Dr. Vansentis, whom I know very well, that they are using calcium curine which can be procured now under the name of Larasin put up by the Hoffman-LaRoche people. He reports something like 140 or 150 cases with excellent results.

Now, the doctor mentioned protein milk. If any of you have ever tried to have protein milk, and I refer to Finkelstein's protein milk, in the home, you are going to realize you are up against it. Fortunately we can not procure a good protein milk that is put up for commercial dispensing through the drug stores. I have used much of it, and what I have used I have found to be equally as good as those made at home.

I certainly have appreciated this paper very much.

*Dr. J. R. Burdick, Tulsa:* This is a splendid paper, and the author has covered the subject so thoroughly that I think every doctor should have it in his library.

I have come to the conclusion from my own experience that calomel and oil in these cases is absolutely wrong. I don't use any calomel at all for these diarrhoea cases any more. They are usually sick babies, and if you give them calomel you are going to have a sicker baby. I do use a great deal of castor oil, milk of magnesia, etc. As to the use of albumen milk. I have used that a great deal with splendid success. If you are going to use the preparation made at home, as the doctor says, you are going to have a lot of trouble, but we have two preparations put up by two different houses, procured through the drug stores, and I have wonderful success with Hall's albumen milk made in Chicago; wonderful success. They are using a great deal of it now.

This proposition of feeding babies is a problem, and of course I think the majority of these cases are brought about by overfeeding. Of course in this climate we have a great deal of trouble on account of poor milk and extended hot weather. But one thing I want to call your attention to is, never overlook the proposition of stimulating these cases. They lose their vitality very rapidly, and unless you give them some form of stimulant you are going to lose them.

Another thing I think that brings about a lot of these cases is a high carbohydrate in



the feed. I am not using near as high percentage of carbohydrate as I used to. I believe I am preventing a lot of these intestinal cases that we have been having so much of in the summer time.

I have enjoyed this paper. This is a problem we have every summer, and instead of lessening, I believe it is increasing.

*Dr. Carl Puckett, Pryor:* I enjoyed the paper very much. He has taken it up from the right standpoint, I think. It is a question of feed more than medication, and my experience is that it is a good thing to commence feeding before the second summer, way back yonder when they are a few months old. The difference is in what they are given. Most people begin to give their children, as soon as they are able to look at the table and see they have something on their plate, a little of this and a little of that, and they have a dilated bowel, and by that of course it is just ready to have trouble when it gets to the second summer.

Another thing, I tell my people what to feed the child; that is, use your head and not your heart when you are going to give the child anything to eat. You know in most cases people give the child what it wants instead of what it should have. Tell them what they should have.

In reality a great many people don't know what they should have, but a great many people know what they should have. If they look around they can always find something, if they work a little.

I have just one chap I have had to raise through the second summer, of my own, and I got by pretty well by being about 600 miles away from its grand parents, which is another thing that has something to do with the second summer.

I enjoyed the paper very much, and I think the doctor has taken it up from the right standpoint.

*Dr. J. R. Burdick, Tulsa:* There is one thing, and I have saved a lot of these cases from diarrhoea when they got right down to death's door. There is one thing we want to remember, and that is to inject into the peritoneal a normal solution. I have had these cases where I was afraid to go ahead and use it, thinking if they died of the operation I would be blamed for it, but I am getting a little bolder and take possession in all these cases when I think every breath is going to be their last, and give them an injection of normal solution in the peritoneal cavity, and in an hour or two they will be sitting up looking at you.

*Dr. W. M. Taylor, Oklahoma City:* How much do you put in?

*Dr. Burdick:* I use lots of it.

*Dr. Taylor:* What do you call lots of it?

*Dr. Burdick:* Well, I have injected anywhere from eight ounces to a pint of normal solution.

*Dr. Taylor:* By gravity?

*Dr. Burdick:* Yes, by gravity. I think the more you get in there the better. It is simply a case of extremity, and you can't get that fluid in there any other way. They will vomit if you give it by the mouth. If you inject the peritoneal cavity full of fluid you will be surprised how those children get well.

*Dr. W. K. West, Oklahoma City:* I want to commend Dr. Pemberton's paper. This is a problem that is bothering me, and I expect it will bother me some time more. Some of these cases the doctor speaks of are exceedingly distressing, and if there is anything that makes me want to quit practicing medicine, it is to observe the dying infant that seems to be beyond all hope, so I am glad to grasp that idea. It has relieved me no little.

Another thing I am troubled with, and a great many others too, is that they will not follow directions. Some old woman will come in and feed the baby something, and they feed them to death, absolutely kill them. They will declare you haven't been feeding them a thing. I remember one time I had a baby that took suddenly worse; had convulsions, I think. I had given explicit instructions about food, but all the enterprising old women in the country knew the doctor was going to starve the baby. They came in and made a lot of chicken soup from the chicken bones it had meat in it. The baby was taken suddenly worse. When I got there, "Haden't fed it a thing, no". While I was there it threw up a hat full of chicken and stuff, but it died. So that is one of my problems, and I wish some fellow would tell me how to solve that problem; tell me how to get people to follow instructions. I believe the influence would stick, if the other fellow wouldn't come in, and the old grandmother didn't get in and tell them what ought to be done. Fortunately all of us have a lot to be thankful for, however, even though some of them are very small.

I happened to be at church one time way up in the woods in Missouri, and it was just after slave time and the negroes didn't have any church. Dr. Pemberton knows something about the diggings out in that country, old White Cloud church, out between Fulton and Cedar Creek. My brother filled the first grave there in about 1878—my half brother. I don't want you gentlemen to think I am old, because I am not—I used to go to this good old church. They had a corner for the negroes. They were having an experience meeting, and the deacon asked her to tell what she was thankful

for. She said, "Oh deacon, I thank the Lord I have two teeth and they are both hittin'." If she could be thankful for that, I imagine Doctors could be everlastingly thankful they are away from the grandparents with the babies.

*Dr. B. J. Vance, Checotah:* I regret that I didn't hear that paper read about forty years ago. I believe I could have had some better results with some little fellows I have had to treat.

I am like Dr. West. I don't think there is any question that confronts the general practitioner of more seriousness than these summer troubles that we have with children of the second summer. In fact I have regarded them worse than most any other class of cases. The trouble with a great many of those cases is you don't see them until they are beyond relief. You are not called until they are dangerously ill. They are sick several days, and they use domestic remedies such as recommended by grandmas and others, and you find them perhaps with loss of flesh and sick stomach retaining nothing on the stomach, bowels running off every few minutes, perhaps blood in the discharges, vomiting; if you give them a little drink of water they vomit it, so there you are. You have maybe a temperature, maybe you have not. They want you to do something right now.

Well, I will have to differ with some of the others. I may be wrong. I always use a little calomel first. Calomel with a little subnitrate of bismuth. If I use Dovers, I use it separately from anything else. I use hot water injections to clean out the lower alimentary tract. In doing that I feed the bowels to some extent with the solution. The solution answers a double purpose; to clear away the fever, and sometimes give them a few minutes respite, as I find they will rest some time afterwards, and again I want to get a thorough emptying of the alimentary tract. There is so much decaying material in the alimentary tract that is keeping up this trouble, that as soon as the stomach will retain it I give them castor oil enough to empty out the tract thoroughly, and then if they are restless I will use my Dovers, something to quiet them a little at the same time, using stimulants as they seem to be needed.

The greatest trouble, and that has not been mentioned in connection with this class of cases, the greatest trouble, I fear, always is that following trouble that goes to its head and they begin to sling their head from one side to the other. I am ready then to make an unfavorable diagnosis.

*Dr. W. M. Taylor:* Now, the classification as given by the doctor, is, I think, a very excellent one. These diarrhoeas may be classified

under the headings of infectious and non-infectious. Under the non-infectious we group the fermentative type and others not of infectious origin. Under the infectious diarrhoea we group those of the dysenteric type, and cholera-infantum type. Each has its characteristic symptoms—(1). The dysenteric type has its frequently bloody mucous stools, colicky pains, rectal tenesmus and perhaps low run of temperature; (2), the cholera-infantum type has a stormy onset, high temperature, vomiting, profuse watery diarrhoea and cold skin. This latter is the type you lose before you have a chance to get a grip on your case. We accomplish nothing in trying to give fluids by the bowel in these cases for there is too much irritation there already and it is not retained.

I am sure Dr. Burdick did not emphasize the use of fluids intraperitoneally too strongly; they must be given thus or by the intravenous route or subcutaneously.

We get in these cases perhaps a true acidosis with the only clinical evidence of it that I know namely, hyperpnea. In these cases Dr. Marriott has suggested that the symptoms are due to the draining away of the fluids of the tissues rather than to the infection itself.

I do not give calomel where there is free blood present in the stools, and am very cautious about the giving of oil either unless there is marked abdominal distention, and then a single dose and not by repeated doses.

*Dr. J. A. Hatchett, El Reno:* With bicarbonate of soda I think I have saved the lives of several children when it seemed like they were dying by just using the drip instead of using it in the peritoneal cavity. Give it water all the time, and they will do remarkably well. Give them eight or ten ounces by gravity in the rectum, and they will hold it. They sleep actually with it in the rectum. They take it all; it is wonderful. As the doctor says, they are starving for water, and they have acidosis, and they have rocking of the head, the dear brother said. I have seen a great many of them rock their head and get well. Rocking of the head may be meningitis. If it is rocking of the head due to toxemia they will get well. Lavage the stomach; give a whole lot of castor oil or calomel. Lavage the stomach; lavage the bowels; give them plenty of water.

I remember one child that I gave up, and told the parents it was going to die. The grand parents were not 6,000 miles away and they were going to send it to the grand parents. I had no idea the child was going to live, couldn't think of such a thing. As a last resort I just concluded this child wanted water. I took bicarbonate of soda, and gave it in the Murphy drip. I taught the mother to give the drip, and had a nurse to take care of the child,

to my surprise it got well. I was perfectly astonished. The value of the Murphy drip cannot be over-estimated in these cases.

*Dr. Pemberton, closing:* I want to thank the members for the splendid manner in which they received the paper and the thorough discussion. A number of points have been brought out. I couldn't cover the whole field in the paper; it was impossible. I want to say that while the paper was entitled "Problems of Second Summer Babies", that necessarily implies babies of a few months old, or possibly a few days old.

I was glad to hear what Dr. Taylor said about calomel. I don't use calomel as a routine measure, but where there is vomiting in this southern country I think calomel is the best. I tell you you can do more good with those little old tablets, as a patient told me once, "Send me back some of those powders and pill tablets, and I think I will be alright," because we use them for all sorts of trouble for preliminary treatment, if you don't push them too far. Where the system is upset and vomiting, there is nothing else works so well in my estimation.

Now, as to the Murphy drip, I am very fond of using that, not only in these cases, but in many other conditions. It is the best diuretic, I think, there is. It starts the kidneys working quickly. That is the way I get the water into their system. I never use the peritoneal, as you spoke of, doctor, but I have an idea, that would be a rational treatment.

Dr. Vance told you of a case of head rocking, walling their eyes back, etc. If you kept the old people from feeding them, you just as well send for some of the old folks. I have had that, doctor; so has every body, for it is only due to a little toxemia, because that is the way it begins, like meningitis, speeds up, and then your patient is hopeless.

I don't know of anything else I can say in closing, except that I want to thank you very much. My mind was on the idea of feeding so much that I left off the other measures that might be adopted in the relief of certain symptoms, but the whole idea is not to let them get to the advanced stages at all.

Yes; I knew there was something else. The doctor said he thought this trouble was on the increase. I don't think so, doctor. I have been in this country since 1901. I used to lose fifteen cases or more every summer, practicing medicine among the foreigners especially about the coal mines. We got to teaching this thing of dieting and feeding to the little girls, Italian and Polish girls who had been attending school. They would stand and listen to what you told their mothers. In a little while you would see that family following instructions. Don't depend on telling it to them.

Write it out, and don't tell them to boil the milk and water, but tell them to put the milk in the water while boiling, and stir the milk and water together for three or four minutes, whenever you want to boil it, boil together and skim off the scum, and don't let anybody add any sugar to it at first. Add the sugar as they get better. I used to use a good deal of albumen water and barley gruel. To do it I had to strain it and use it for only a very short period. You can switch back to the milk and water diet and the carbohydrates later, if you manage it right. But it is hard to make those sudden changes sometimes, unless you can distinguish which form you have. I use carbohydrates for a day or two, and then switch to the protein. In some of these cases we have a little fermentation, unless we have a microscopic examination made of the stool and know exactly and scientifically where we are all the time.

I thank you very much for the way you received the paper.

## INFANT FEEDING\*

By DR. J. L. DAY  
NORMAN, OKLA.

Every man engaged in general practice of medicine, whether he desires it or not, is frequently confronted with the problem of the proper artificial feeding of the infant. The percentage method presents so many intricacies of technique, and so many difficulties in carrying out, both on the part of the physician and the mother, that the marked tendency has been to give up any attempt at modifying cow's milk, which contains the essential elements necessary for the growth and development of the infant, and to fall back upon some one of the many advertised preparations on the market, follow the directions on the label and give practically no personal consideration to the individual requirements of the patient. The purpose of this paper is not to give every detail of all methods of artificial feeding, but to present a few fundamental principles, largely obtained from "Dennett's Simplified Infant Feeding," which may be helpful to the general practitioner in rationally and scientifically supervising the proper feeding of that large number of infants who require partly or wholly to be artificially fed.

Every infant should, if possible, be breast fed, and of course the larger proportion are, and before a baby is given any artificial food, no matter how carefully or scientifically prepared, every effort should be made to keep it at the breast. The case is rare indeed where the

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mother's milk is actually detrimental to the life of the child, but cases are numerous where complementary or supplemental feedings are necessary.

Dennett outlines the following instances where artificial food may be required:

First-Complemental feedings where the infant does not gain normally in weight after a thorough trial under the best possible conditions.

Second-Supplemental feedings, where the infant is being intentionally weaned from the breast or the mother has to be away a part of the day.

Third-Permanent removal from the breast where the infant has severe prolonged gastric or intestinal indigestion associated with loss of weight; where at two previous births the mother has been unsuccessful in nursing the baby; where the mother has puerperal convulsions; pregnancy; prolonged acute infectious disease as typhoid fever or pneumonia; where the mother has tuberculosis, epilepsy, nephritis, any malignant disease, anemia, or where the mother or infant has contracted syphilis after the infant's birth.

In prescribing food for the infant it is necessary to recall the essential requirements for the infant foods. First, it must contain the proper elements to maintain nutrition and to allow growth; second, it must be digestible; third, it must contain the proper quantity.

Mother's milk contains from 1 to 2 per cent proteid, 3 to 4 per cent fat, 6 to 7 per cent sugar, and it might seem that the ideal artificial food should conform to this standard. In the past so much emphasis was placed upon having the proper percentage of the foregoing in the food by the use of cream and top milk that the digestibility was neglected. It is possible to so modify cow's milk that these percentages are accurately obtained, yet the mixture is not well borne except by infants with the strongest digestive powers, for the obvious reason that the proteid, fat and sugar of the cow's milk are different from those of the breast milk.

By diluting whole cow's milk  $\frac{2}{3}$  or  $\frac{1}{2}$  we obtain about the proper amount of proteid since cow's milk contains over 3 per cent proteids, but as the proteid of cow's milk is different from the proteids of mother's milk, we should not give stronger dilutions than one half milk and one half water to infants under three months of age, or to those with much digestive disturbance.

Theoretically the infant should have about 4 per cent of fat, but experience shows that this amount of fat in cow's milk is very difficult to digest, and that it is possible to make use of an extra amount of proteid and sugar, chiefly sugar. Because the fat is so difficult to digest

it is better to use the whole milk or in extreme cases skimmed milk; when this is diluted to three parts milk, and one part water, or equal parts of milk and water we have a deficiency of fat, but Dennett believes that this can be made up by adding sugar.

Since cow's milk diluted half and half contains but 2 per cent sugar it is necessary to add sugar to the bottle feedings in order to bring it up to the amount in breast milk, this is done by adding cane sugar or malt sugar rather than using milk sugar.

The mineral salts are of great importance in infancy, but they are found in abundance in both breast milk and cow's milk, so that there is no necessity for supplying them artificially.

Much has been said about the digestibility of artificial foods, and this is of the utmost importance, for we may secure the exact percentages in artificial food found in breast milk, yet have severe gastric or intestinal indigestion. Simple milk and water mixtures have been proven to be more easily digested than the more complicated feedings used in the past.

It is now generally conceded that boiling the milk and water together is the best and easiest methods of making the curds or proteids digestible and it is therefore unnecessary to add alkalis or peptonizing agents for this purpose.

High fat mixtures are not to be used with infants having digestive disturbances, and the majority of pediatricians at the present time believe that even for well infants the fat as it occurs in cow's milk is sufficient when the whole milk is diluted properly, and simple mixtures of whole milk and water are becoming more and more popular.

Sugar is in many ways the most important element in the food. It serves two purposes, first, it supplies a large amount of nourishment second, it helps to make up any deficiency in the fat and also acts often as a laxative. Dennett uses cane sugar with healthy infants, and dextri-maltose with those having digestive disturbances, but finds that it is sometimes necessary to change from one kind of sugar to another and even in extreme cases of indigestion to abandon all artificial sugar and use dry milk, thus obtaining the sugar normally found in the mother's milk.

The amount of sugar which the ordinary infant requires is one or one and one half ounce in twenty-four hours, depending on the weight; a well infant under ten pounds should have one ounce, and one over ten pounds one and one-half ounces, but in any case it is necessary to begin below this amount and build up the tolerance of the individual infant, increasing or diminishing the quantity or even changing the kind.

The next important thing is to determine the amount of food a certain infant needs. This is done by estimating the caloric requirements and is not so complicated as we have supposed. We have only to remember that one ounce of milk equals twenty calories, and that one ounce of sugar equals one hundred and twenty calories. Then we may divide infants roughly into three classes: first, fat infants over four months old require forty to fifty calories to the pound weight in twenty-four hours; second, the average moderately thin baby under four months requires fifty to fifty-five calories per pound weight, and third, the emaciated baby needs sixty to sixty-five calories per pound. With these facts in mind we can fairly accurately estimate whether we have a forty calorie or a sixty calorie infant and by simple calculations we can determine about how many ounces of milk and sugar will be needed for a twenty-four hour period. Then we divide this amount into as many parts as we desire feedings, five, six or seven, and all that is yet required is to add the water. As to the quantity of water to be added we can remember that the infant of average size for its age should have for each feeding one or two ounces more than the number of months of its age. The undersized infant should have at each feeding an ounce for each month of its age, the two limitations are that it is never necessary to give more than eight ounces at a feeding and second that during the first few weeks of life the quantity at each feeding should be increased as rapidly as possible up to three or four ounces at each feeding. The exceptions to the foregoing simple rules are, infants, emaciated, undersized, or those with gastric or intestinal disturbances, and it is always necessary to begin with weaker dilutions, less sugar and gradually increase till we have met the caloric and quantity requirements for the twenty-four hour amount.

### Conclusions

Simple milk and water mixtures are the best both scientifically and practically.

The actual percentage amount of fat is not attained but this deficiency is made up by the addition of sugar.

The proteids are made more easily digestible by boiling the milk and water mixtures together.

The caloric requirements are borne in mind and can be fairly accurately obtained by simple methods.

### Reference

Simplified Infant Feeding, R. H. Dennett; J. B. Lippincott Company.

### Discussion

Dr. A. L. Solomon, Oklahoma City. I am glad to hear Dr. Dennett quoted so freely here

today. I know Dr. Dennett very well, having worked with him, and I am sure he would appreciate it did he know it. Of course, having worked with Dr. Dennett some time, like he, I don't use milk sugar. I never use it. I think it is Finkelstein who says every case of fermentive diarrhoea is directly traceable to milk sugar. I use preferably dextri-maltose, and in some instances cane sugar, not often.

Since leaving New York, I have found a difference in New York babies and Oklahoma babies, though Dr. Dennett's caloric requirements work mighty well in New York, but they don't work here. These babies eat more. That is the truth. You may feed one of them according to the caloric requirements and they will do fairly well, but you increase that to five or ten calories to a kilogram, or five calories to the pound, raise the figures about five, and they will do much better in Oklahoma than with the other. I don't know; perhaps they are used to eating more than they are in New York.

Dr. J. R. Burdick, Tulsa: There is something to this. Now, in Chicago, we used to use a certain amount of calories, and I found in Oklahoma we had to use more calories than we did in Chicago.

I don't agree with the doctor about the use of milk sugar, or Dr. Dennett. I know him very well, and the doctor says in his paper that in gastric or intestinal cases he does not use dextri-maltose or cane sugar. I have been feeding babies for nineteen years, and from my own experience, take a baby that has any intestinal trouble, he has a very poor palate for dextri-maltose, but I do use milk sugar, and of the two I have better results with the milk sugar. I can use more of it with less disturbances. I may be wrong, but that is my experience.

As to the amount of calories, that, I think, is up to the individual judgment in the individual case, and I think you will have to learn the amount that meets the requirements of the individual baby. As a usual rule these babies will stand a stronger feeding than is usually worked out.

Dr. Leila E. Andrews, Oklahoma City: Pardon me if I indulge in reminiscences. When I first got out of school I couldn't understand why the babies I saw as country babies in the same town in which I had lived, grown up and went away to go to school, when I came back to see them, why, how they could get along with the modifications that their mothers had been giving them; water and milk with granulated sugar, and sometimes not granulated sugar. But after all we have had in science, it is really the simpler modifications.

I know of a baby hospital in Baltimore, and I spent several hours at the children's

hospital at——I can't think of the name just this minute, at Hopkins, and nearly all of their modifications in simple cases were the simple mixtures of milk and water with the addition of cane sugar. In diarrhoeas they take away the sugar, and then when they put them on sugar again, adding the dextri-maltose. Just shows what they are doing there. The simpler the modifications the better, taking the children entirely off of fat, of course.

I enjoyed the doctor's paper very much.

*Dr. W. M. Taylor, Oklahoma City:* I believe the plan suggested by Dr. Day to be the most practical one in the modification of milk, namely that of the simple dilutions of whole milk plus sugar to bring the carbohydrate percentage up to that required.

Undoubtedly cream causes much of our trouble in the modification of milk to suit the individual case, I think more than any other factor. I do think that often the modification by use of top milk or 7 per cent fat, after the third or fourth month often works better, but during our long, hot summers down here a lower percentage of fat is preferable.

We must not overlook the fact that by cutting down the fats too much we may get a mild grade of intestinal disturbance—perhaps mild case of rickets which may be difficult to detect. I believe there is a possibility of getting too low a percentage of fat in our simple dilutions of whole milk.

The essayist quoted Dr. Dennett as saying that the indication for complemental feeding was the fact that the baby is under weight. There is another reason even more important and that is that nothing stimulates the breast to full capacity as much as the complete emptying of them at every nursing.

As to the choice of the various sugars used, in my experience the malt sugars such as dextri-maltose are not well tolerated in the cases prone to regurgitation.

*Dr. J. L. Day, closing:* It is with a great deal of trepidation that I have been trying to present this, but I am in the general practice, and therefore am not able to confine myself to infant feeding entirely. But, I have been interested in it for a long while, and I had a pretty average course in college, and the text books have been so confusing to the average practitioner, not putting forth a method that would be practical, that when I got hold of Dennett's book, although it has its imperfections, and we may disagree with some methods of his, yet it put it to me so simply, and helped me so much, that I presented it.

I thank you for the discussion.

## THE WASSERMANN REACTION

### AN APPEAL FOR STANDARDIZATION

WANN LANGSTON, M. D.

OKLAHOMA CITY, OKLAHOMA

THE OKLAHOMA SEROLOGICAL SOCIETY

In a former article some of the many factors influencing the Wassermann reaction were discussed, and certain suggestions made, which, if carried out, will to a very great extent eliminate the disagreeable discrepancies occurring in Wassermann reports. The purpose of this article is to consider some of the ways in which the laboratories themselves can help in the work of standardization.

Fully appreciating the unsatisfactory status of the Wassermann reaction, a large number of the serologists of the State held a meeting in Oklahoma City on December 29, 1919, to consider the adoption of a standard test and a uniform method of reporting results. At this meeting a permanent organization was effected, the society to be known as the Oklahoma Serological Society, the purpose of which is "to formulate from time to time certain technics and methods of reporting results of the Wassermann test and other serological reactions, such standard methods to be used as far as practicable in laboratory work of this nature thruout the state, so that results may be more uniform, and the interpretation understood better by the profession."

It was agreed by those present at this meeting that so far as the serologist is concerned, two main factors are to be considered: first, the technic; and second, the antigen used in the test. It was found that almost every laboratory was running the multiple antigen method, and that for the most part the anti-sheep system was being used, yet the technic in no two laboratories was exactly the same, and the antigens were standardized differently by different workers; indeed, there was but little uniformity. It was decided at this time that a more uniform method of running the tests would be put into use, and that the antigens should conform to a certain standard, or better, that, if possible, the laboratories should use identical antigens. It was further decided that a series of experiments should be conducted to determine to what extent the laboratories were at fault.

During the fall and winter just past, six laboratories entered into a series of experiments conducted in the following manner:—Thirty specimens of blood were taken at random from patients attending a general clinic. About twenty cubic centimeters of blood were drawn from each patient and divided into six portions, one portion being sent to each of the laboratories immediately. Each laboratory used its



own method from this point, some running the single antigen while simple alcoholic antigen, acetone insoluble fraction and cholesterinized antigens were used. The results are very interesting.

First, let us consider the results of the tests with cholesterinized antigen. Of the thirty specimens:

Eight were found strongly positive by all laboratories; thirteen were reported negative by all laboratories reporting; five were reported negative by three, positive by one; two were reported negative by two, positive by two; two were reported negative by one, positive by three.

With the acetone insoluble fraction antigen the results were as follows:

Six were found positive by all laboratories reporting; nineteen were reported negative by all laboratories reporting; three were reported negative by two, positive by one; two were reported negative by one, positive by two.

With the alcoholic extract antigen the reports were:

Five were found positive by all laboratories reporting; eighteen were reported negative by all laboratories; one was reported negative by three, positive by one; one was reported negative by two, positive by two; two were reported negative by two, positive by one; three were reported negative by one, positive by three.

A second meeting of the society was held at Shawnee January 19, 1921, at which time these results were reported and discussed. Since all these specimens were taken under identically the same conditions, none of the factors mentioned in the previous paper were involved; consequently, the discrepancies in these results must be due to conditions existing in the various laboratories themselves.

It was again agreed that the antigens used in the various laboratories, and the technic of the individual workers, were responsible, and it was decided to adopt a standard of reagents and of technic as simple as possible, and at the same time scientifically correct. Two antigens were agreed upon, to be known as the Oklahoma Serological Society Standard Antigens, and they must conform to the following standard:--

First, the alcoholic extract antigen: this is a plain alcoholic extract of normal beef or guinea pig heart, of such potency that 0.1 cc of a one to twenty dilution is antigenic, and 0.8 ccs not anticomplementary. 0.1 cc of a one to ten dilution of such an antigen shall be the "dose".

Second, the cholesterinized antigen is the above described alcoholic antigen with 0.2%

C. P. cholesterol in solution, and it shall be used in the same relative amounts as the alcoholic. These antigens are to be prepared in one of the laboratories of the Society, and standardized by each member, and when found satisfactory, distributed to the various laboratories for use.

Technic: The following is briefly the technic adopted for use in all laboratories of the Society.

1. Complement: Fresh, pooled guinea pig serum, one to ten dilution, dose one and one half titrated units.

2. Cell Suspension: One to ten suspension of washed packed sheep red blood cells, dose 0.1 cc.

3. Hemolytic Amboceptor: Two titrated units of anti-sheep amboceptor, not to exceed 0.5 cc of a one to one hundred dilution.

4. Patient's serum: Inactivated at fifty six degrees Centigrade for not less than twenty nor more than thirty minutes, used in amount of 0.1 cc.

5. Antigen: 0.1 cc of a one to ten dilution of alcoholic extract and cholesterinized antigens standardized according to the standards of the society.

6. Period of incubation: each period to be thirty-minutes in the water bath or one hour in the incubator at thirty seven degrees Centigrade, the second period to be followed by twelve to twenty-four hours in the refrigerator before a final reading is made.

7. Normal saline solution, 0.85%, to be used in making all dilutions, and in making up the final bulk to approximately two cubic centimeters.

The Standard Antigen is now in the hands of the members of the Society, and these laboratories are now using the technic adopted. An effort is being made to have all serological laboratories of the State adopt these methods, and we believe that within a few months every laboratory will be using them.

Each laboratory is encouraged to carry on any special investigations they may desire, and to give any additional reports; and as often as any method is proved more scientific or more accurate than the ones now adopted, they will unquestionably be adopted by this society.

**Vaccines for Common Colds.** There is no scientific evidence that common colds can be prevented by the use of vaccines, despite the glowing recommendations of vaccine makers and the patter of the detail man. Colds characterized by catarrhal inflammation of the mucous membranes of the nose and the throat are caused by various organisms. The organism concerned in one epidemic is different from that in another. It is impossible to anticipate what organism is about to invade the household or community. Inoculation of mixed vaccines fails to produce immunity (Jour. A. M. A., Nov. 13, 1920, p. 1361).

## CYST OF BARTHOLIN'S GLAND

By FRED S. CLINTON, M. D., F. A. C. S.  
TULSA, OKLA.

History of case: No. 4864. Mrs. . . . . ., age 34, admitted to Oklahoma Hospital Sept. 27, 1920. Family history negative. Past history; usual diseases of childhood with good recovery. Abscess of Bartholin's gland right side a number of times which has been incised and drained.

Present History: About three months prior slight swelling occurred in the right vulva gradually increasing in size until it was about as large as a small orange at the time of admission to hospital. Patient extremely nervous, complains of backache, etc. Patient well developed and nourished. Abdomen negative. A history of gonorrheal infection confirmed by slight scars of previous incisions of the tumor referred to above.

Diagnosis: Cyst of Bartholin's gland.

Treatment: Under ether anesthesia incision was made through the skin and other tissues, and by careful dissecting cyst was removed intact and wound closed without drainage.

Outcome: Wound healed by first intention. Patient made rapid recovery and was dismissed from the hospital September 30th returning for a few subsequent observations.

Remarks: It is desirable to make the incision through the skin rather than through the membrane of the introitus near the duct. If the natural lines of cleavage can be recognized and followed the work is much easier.

Caution: The comparative frequency of Bartholinitis might lead one into error through carelessness or over-confidence, and it is wise to remember that comparatively large cysts in this region are to be differentiated from hernia, hydrocele of the round ligaments, true vaginal cysts, solid tumors such as lymphomata of labia, perirectal abscesses, and particularly from hernia and cyst combined.

## TREATMENT FOR COLIC IN BREAST-FED INFANTS

Morning and evening, C. G. Gurlee, Chicago, (*Journal A. M. A.*, Dec. 18, 1920) gives the breast-fed infants about 5 cc. of the liquid culture of active lactic acid bacilli, and each breast feeding is preceded by 1 gm. of powered casein. The ordinary casein of commerce is not to be used. Powered casein is not soluble by ordinary means, hence it is necessary to make a paste and place it on the back of the infants tongue. If it is impossible to obtain the powered casein, one may carefully skim milk and take the curd of the milk. The quantity of curd to be used before each nursing is approximately that obtained from an ounce of skimmed milk. Gurlee says it is unusual for a case of colic to resist this treatment for longer than a week or ten days, and usually the benefit begins to appear within from twenty-four to forty-eight hours.

PROCEEDINGS OF ST. ANTHONYS  
HOSPITAL CLINICAL SOCIETY

S. R. CUNNINGHAM, PRES. ANTONIO D. YOUNG, SECY.

Space does not permit the report of four deaths at this time.

## CASE REPORTS

Dr. R. M. Howard: *Branchial Cysts and Fistulae.*

Until Ascheran, in 1832, discovered the connection of the fetal branchial clefts with congenital fistulae, little was known or written of them. It remained for Luschka, Roser, Koenig and others to discover the real congenital nature of certain obscure swellings, cysts, and fistulae which occur in later life and prove their real fetal origin.

There are four branchial clefts in the four weeks fetus, the analogues of the gills of the fishes, with four intervening bars called branchial arches. The bars are called respectively the mandibular and hyoid bars, visceral bars, and first and second branchial arches. Of the intervening clefts only the first should persist, forming the ear, auditory canal and Eustachian tube. The other three clefts should coalesce in fetal life, leaving the neck smooth. When this does not occur, we find congenital cysts called branchial cysts, or fistulae. These may, or may not, open directly into the pharynx from the outside.

It is not considered by embryologists that fetal clefts are fissures in mammals, entirely through from skin to the pharynx, like gills. They are merely grooves lined by the hypoblast within and epiblast without, separated by layer of meso-blast. Clinically, however, congenital fistulae may be complete epithelial cavities from skin through the pharynx, giving rise to at least five types of abnormalities about the human neck: 1. Complete branchial fistulae. 2. Incomplete external fistulae. 3. Incomplete internal fistulae. 4. Branchial cysts. 5. Branchial Dermoids.

Internally, the four locations corresponding to the branchial clefts are slight sulci on the pharynx, or natural grooves, viz.,

1. First pharyngeal groove (tube entrance).
2. Second groove (Rosenmuller's sinus, tonsillar sinus).
3. A fold not well marked in front of the laryngeal nerve.
4. Fourth groove (fundus branchialles, sinus pyriformis).

When persistent and abnormal, these inner sinuses cause congenital sacs and pockets, which may develop fistulae pointing internally, around the Eustachian tube, tonsil etc.

These are not the only congenital cysts, however, due to the clefts. Just as the hyo-man-

dibular, or first cleft forms the auditory canal and has the ear, or pinna at its posterior opening, so the other three branchial clefts sometimes form small false auricles which persist on the side of the neck at the posterior ends, in the form of rudiments of cartilage, and sometimes little hairless or pigmented spots. Such congenital deformities are called "cervical auricles".

These congenital fistulae do not always cause symptoms, and may not be discovered until some distention, and irritation with mucous hyalin, or muco-purulent discharge has called attention to them. They may escape attention up to adult life. After forming a permanent fistulous opening, they remain as somewhat cord-like, or slightly indurated tracts leading inward. Their location is lateral to the midline, and anterior to the anterior border of the sterno-cleido-mastoid muscles and they may be uni-lateral, or there may be as many as three pairs. Their location helps to distinguish these from other cystic conditions about the neck causing fistulae. They may simulate abscess in case of obstruction, and inflammation.

The orifices are often minute points difficult to see, although they may be large and easily detected.

The finest probe is usually necessary to detect their direction.

Hochenegg has called attention to a significant sign in these fistulae, i. e., their great sensitiveness to the probe. Almost always the contact starts a spasmodic cough, as if the probe had touched the interior of the pharynx. This prevents satisfactory sounding unless the tract is cocaineized.

The treatment of these cases is difficult by operation. In some the lining is so intimately connected with the great vessels and the deep spaces, that the operation cannot be completed. Partial removal leads to recurrences, cyst formation and disappointment. Careful attention to drainage, and cleansing of the cavity often is followed by complete arrest of the discharge. Treatment by injection of caustics has been abandoned because of failures to cure.

In spite of the difficulties encountered in operation, this remains the most scientific course to pursue, and gives results in a large number of cases.

From the pharyngeal, or tonsillar region downward, the tract crosses the pharyngeal, and hypo-glossal nerves and passes under the stylo-pharyngeus and stylo-glossus muscles, emerges alongside the great vessels and passes between the external and internal carotids, and crosses the digastric muscle to the hyoid region. It then finds exit between the sterno-mastoid borders, or near one of them; some-

times the outlet is as low as the top of the sternum. To remove such a tract is always difficult, but if it is not too adherent to the vessels they may be extirpated including their inner and outer openings.

Congenital sacs, i. e., cysts and dermoids, are to be removed in the same way, but frequently offer fewer difficulties, as the internal opening may be closed off below the dangerous area.

During the past year I have had two cases of this condition. One was an occluded fistula forming an infected cyst of one month duration; the other a cyst that had existed for three years.

The first case was Harvey K---, age 6 years, schoolboy, who was referred to me by Dr. C. R. Day. His family and personal history were negative. Since early childhood the family had noticed four small depressions or openings, two on either side of the anterior lateral surface of the neck, about 3-4 inch apart and about the middle of the neck. From these openings occasionally it was noticed a clear sticky substance would exude. One month ago they noticed a small, soft tumor mass just above the middle of the neck on the left side, on a level with and above the upper opening.

Physical examination revealed a normal, well nourished youngster except for the above findings. The mass was rounded, fluctuating and tender. He had complained of some pain in it. It was about the size of a hen's egg, and freely movable. His temperature was 100 and pulse 80, respiration 20.

The white blood count showed a total of 11,850, polys 80. Under ether anesthesia, on May 28th, 1920, a transverse incision was made over the mass, and it was easily separated from the surrounding tissue. A cord-like prolongation was followed up to above the bifurcation of the carotids where it was lost, and torn in to two. I could not pick it up again, but felt that it was torn across not far from its inner opening. The wound was closed without drainage and healed primarily. I saw this child in January of this year and he had had no further trouble although at this time a thin mucoid-like material could be expressed from one of the remaining openings.

The other case was Eva J---, age 34, school teacher, referred to me by Dr. A. W. White. Her family history was negative. She had the usual diseases of childhood. Three years ago she noticed a small, soft, rounded mass on the right anterior side of the neck. This was not painful. It gradually increased in size, but never at any time caused any pain, nor was it tender on pressure.

Examination revealed a healthy young woman with negative physical findings except for a soft, smooth, fluctuant tumor, the size of a small orange on the front of the neck to the



right of the larynx. This was freely movable and not tender on pressure. Her temperature, pulse and respiration were normal. The blood count was normal.

On August 28, 1920, under local anesthesia, a transverse incision was made over the tumor. It was easily separated from the surrounding structures and a tube-like prolongation was, by blunt dissection, followed up between the great vessels, and inward and upward to right tonsillar region. It was twisted off at the mucous border. Some blood appeared in the mouth, leading us to believe that the tract which was probably not open into the pharynx, was removed entire. The wound was closed without drainage. Healing was primary. The patient was well at the end of three months. I have not heard from her since.

These represent the only two cases I have been able to find in our records. Both terminated favorably, but both were fairly easy to do, much easier than the average case. Many of the cases offer the greatest difficulties and in some the operation cannot be successfully done.

#### Discussion

**Dr. A. A. Will.** I would suggest the use of methylene-blue solution to aid in following the tracts. As a rule it will go through the smallest tract. I see no reason why these cases should not be cured.

**Dr. M. Smith.** Is it not probable that you did not dissect out the entire tract? Is it not probable that the original tract communicated with the other two? If you don't dissect the entire fistulous tract it will return. Will methylene-blue follow such a tortuous tract? Probably there is more than one opening and may it not be draining through others instead of being cured?

**Dr. R. M. Balyeat.** Can dilute barium be injected and give additional information?

**Dr. Howard,** closing: I have nothing to add. To answer Dr. Smith: I cannot agree that there might be more than one opening into this tract. May have as many as three fistulous openings on either side from entirely separate clefts. I feel sure when more than one opening is present, they are separate and distinct and are not opening into a common opening on the interior. The first case is not cured. He has three other openings that are not causing any disturbance. In the second case the tract was removed entire. To answer Dr. Balyeat: Such small openings make it very difficult to do injecting. In order to do it one would have to cocaineize the tract, as introduction of foreign body causes coughing.

**Dr. L. E. Andrews:** *Upper Arm Paralysis in a Newborn.*

Baby boy C---, was born at term in this

hospital Nov. 20, 1920, and is now four months old. He is the second child of his mother and pregnancy is uneventful, except that for the last two months she was obliged to go to bed on several occasions for short periods of time on account of discomfort in the lower abdomen, hips and legs.

One month before her confinement, upon examination, the position of the baby was Right-occipito-Anterior and the head was engaged.

The membranes ruptured at the beginning of her labor and quite a little amniotic fluid escaped. She then entered the hospital but it was several hours before her pains became effectual. Dilatation was, therefore, slow and not completed until fourteen hours after her pains began. During labor the fetal heart tones were around 140 and were of good quality.

An hour after dilatation was complete, on account of the lack of progress and fatigue of the mother, an easy low forceps was done. The delivery of the shoulders was far more difficult than the head had been, and the umbilical cord was wound once around the left shoulder -- this was released with some effort. There was a slight degree of asphyxia, but after the usual methods, the baby responded satisfactorily.

The baby weighed 7lb 13 oz. and was of average size and nutrition. Two days afterward the nurse called my attention to the fact that the baby was not using his left arm.

An examination revealed these points: The left arm was flaccid and was lying at its side. There was free and normal motion at the shoulder joint. No crepitus or unnatural motion over the clavicle or humerus. There was some apparent atrophy of the muscles of the left shoulder, especially the deltoid. Nothing was felt over the neck or in the axilla and no pain was elicited during the examination. The forearm and hand were unaffected. The baby was taken to the X-ray and a deformity found at the middle and outer thirds of the clavicle, which did not appear like a fracture.

I asked Dr. Reed to look at the child and he believed that, on account of the atrophy of the muscles and peculiar appearance of the X-ray, there had been a congenital defect of the clavicle with an injury to the circumflex nerve.

The arm and shoulder were massaged gently each day and then put up flexed and across the breast, as in fracture of the clavicle. After two weeks the bandages were removed for a part of each day and the massage and passive motion kept up. After another two weeks the bandages were taken off entirely. It was two months until any effort to raise the arm was noticed and since that time gradual improvement in the function of the nerve and muscle has been going on.

In searching for a reason for the deformity of the clavicle, it occurred to me that mal-position of the umbilical cord, wound tightly around the left shoulder as we found it at delivery may have been this cause.

The head was engaged and in the same position a month previous to the delivery, as it was when labor began.

I believe that the continuous pulsation of the cord against the clavicle, with pressure also against the nerve at this location, resulted in this deformity for interference must have been over some period of time to have caused the atrophy of the deltoid from a paralysis of the nerve supplying it.

#### Discussion:

**Dr. A. D. Young:** The lesion affects the arm and not the forearm, and is in the 5th and 6th nerve roots (demonstration). The musculo-cutaneous is most often injured because of high application of forceps blade, pushing over of head, and pulling of arm. The patient has had no weakness of the forearm. The brachialis is sometimes paralysed. It is called Duchenne or upper arm paralysis. Treatment: Spears says many get well in from a few weeks to a few months if paralysis has not been complete; a few are helped by surgery; and a few are helped by nothing. One should wait several months before doing surgery. Spears says operation should not be done for four years. I believe this case will get entirely well.

**Dr. J. F. Kuhn:** If this is a true Duchenne, why is there such early deltoid involvement-atrophy within two days after birth? This is more like an intra-uterine injury.

**Dr. S. R. Cunningham:** A few months ago I had occasion to review the literature on this subject, in reporting a series of cases. The injury is due to separation of the head and neck from the shoulder. The supra and infraspinatus muscles are paralysed and the subscapular overacts, rolling the whole shoulder over. The only treatment is severance of the head of the subscapular and reconnection of the severed nerve fibers. I have operated several cases in this way, with good results. The best results were on a patient eight months after the injury.

**Dr. Andrews, closing:** I do not know what caused this condition. I believe the umbilical cord had something to do with causing the atrophy.

**Dr. C. B. Taylor:** *A case of Central Nervous System Syphilis.*

R. N---, male age 30, auto mechanic. Family history unimportant. Personal history: Unimportant except that ten years ago he had a penile sore. This was diagnosed a chancre and one dose of Salvarsan administered in a hospital

in Oklahoma City. The subcutaneous tissue was evidently infiltrated with the Salvarsan, as the patient says he spent two weeks in the hospital recovering from a terribly sore arm. He said he was assured at this time that he was cured, and was advised by his physician that he could safely marry. This he did nine years ago. He has two apparently healthy children.

**Present illness:** In April, 1919, patient noticed that his left eye began to blur. The vision in this eye continued to weaken up to the time he came for examination. At that time he had difficulty recognizing objects across the street. For some months previous to examination he had had dizzy spells; at times severe headaches which were worse in the evening. He also noted (as did his wife) that he was very irritable and easily angered. He has had no lightening pains in the legs or thighs, and no "girdle" sensations.

**Physical Examination:** Well nourished, well developed man of apparently thirty years of age. Musculature symmetrically developed. He presents a general adenopathy. Romberg positive. Tendon reflexes absent. Slight Babinski. Pupils react to light sluggishly but quite readily to accommodation. Dr. Salmon (to whom I am indebted for this case) reports a beginning optic atrophy of both eyes.

Patient entered St. Anthonys June 14, 1920. At this time he had a negative blood Wassermann, with a positive Hect-Gradwohl control. Spinal fluid was found to be under slight pressure. The laboratory findings were Wassermann and Hect-Gradwohl control strongly positive; cell count 79.6; albumen... globulin...; sugar increased; Lange colloidal gold 5,555,543,000.

**Treatment:** June 17, 1920, Neo-salvarsan .45 gms. No reaction. Weekly injections of mercuric salicylate, grs. 1, were instituted, and KI to saturation. June 26, 1920, Neo-salvarsan .6 gms., followed in 30 min. by withdrawal of 20 cc of spinal fluid. The only variation from the first examination was that the cell count was reduced to 25.9. July 4, 1920, Neo-salvarsan .6 gms. July 10, 1920, Neo-salvarsan .6 gms., followed by drainage of spinal fluid. Cell count 29.2; albumen...; globulin...; Wassermann positive; Lange colloidal gold curve 5,555,420,000. July 17, 1920, Neo-salvarsan .6 gms. July 24, 1920, Neo-salvarsan .6 gms. followed by spinal drainage. Cell count 26.4; globulin...; albumen...; Lange colloidal gold 5,421,000,000. Two more injections of Neo-salvarsan were given at weekly intervals and the mercury and KI were continued until Nov. 12, 1920. Except for the few days spent in the hospital for each spinal puncture, the patient has continued with his work. From Nov. 12, 1920,

to Dec. 11, 1920, all medication was discontinued. On Dec. 11, 1920, the blood Wassermann and Heet-Gradwohl control were negative. Since this date the patient has been getting mercuric salicylate, grs. 1.5, once a week and KI to saturation.

**Present condition:** Patient says that the sight in his left eye has improved considerably. His headaches have entirely disappeared. His wife informs me that his disposition has improved immensely, and that he is not so irritable or so easily angered. His tendon reflexes are perceptible at times. He still shows a positive Romberg. His pupils react to light much more quickly. The general feeling of despondency that we see so often in these cases has disappeared.

We must remember that every case of syphilis is potentially central nervous system syphilis. At the large clinics, 50% of untreated syphilis have some central nervous system change. Not necessarily do all cases have clinical symptoms. It is conceded that some get well without permanent injury, as is the case of some of the skin lesions. It is important that a patient should not be promised a cure from one dose of Salvarsan, as seems to be the idea of many practitioners. The standard treatment of central nervous system syphilis has not yet been established.

#### Discussion:

**Dr. A. D. Young:** We say a patient has central nervous system syphilis when he begins to show symptoms. As Dr. Taylor has so aptly pointed out, it is present long before symptoms appear. The first change is arterial, an arteritis and a sort of meningitis. All patients that have an increased cell count do not have parenchymatous changes. Parenchymatous changes can not be made good. The good is done while only the arterial pathology exists. If medicine is introduced into the spinal canal, it seems to me that the Salvarsanized serum is the best.

**Dr. L. A. Riley:** I would like to ask how soon central nervous system symptoms may appear? I saw one case in six weeks after the initial lesion.

**Dr. R. M. Balyeat:** What is the tendency for neuro-syphilis to be transmitted to the patient's children and grand-children?

**Dr. J. W. Riley:** We must treat these cases before there is any organic change. The Salvarsan is the heavy artillery. We must use the mercury as an infantry.

**Dr. Taylor, closing:** It is questionable whether syphilis is ever cured unless treatment is instituted within a few days after inoculation. Twenty-five percent. of cases in the chancre stage show central nervous system involvement (by spinal fluid findings). It occurs during generalization.

## PROCEEDINGS OF ST. ANTHONY'S HOSPITAL CLINICAL SOCIETY

**Dr. D. D. McHenry:** *A Case of Partial Staphyloma.*

Miss E. W. is an Indian woman twenty-eight years of age. The history is that she first had real trouble with her eyes eight years ago, the results of an old trachoma. The left eye was first involved, the right eye first showing symptoms two years later. She received no treatment until about two years ago, and then without good results. She has been blind in the left eye for four years, and has been almost blind in the right eye for two years, only being able to see moving objects, and then with very inaccurate recognition. She came to me a few months ago, after having been told by several competent men that there was nothing to be done.

The physical examination of the parts in question shows old trachoma of both eyes, total staphyloma of the left eye, and partial staphyloma of the right eye with dense scars over all of the cornea except the lower edge, about four millimeters and that is vascular.

Obviously little could be hoped, other than that we might be able to preserve enough vision to allow the patient to get about without stumbling into objects. In these patients, even that small amount of vision means a great deal. The small amount of partly clear cornea of the right eye furnished this only hope.

On Nov. 4, 1920, I did an expression of the trachoma bodies of both lids, and Knapp's amputation of the staphyloma of the left eye. On Nov. 30, I resected a diamond-shaped piece of cornea in the partial staphyloma, Fox's method, making the lower incision with a cataract knife and upward with scissors. I used three silk sutures in enclosing (demonstration). The cornea was very thick and opaque.

The left eye staphyloma wound healed with a flat scar and a slightly more comfortable eye. In the right eye, the external one-fourth of the wound did not heal by first intention, as the rest of the wound did. The iris filled the unhealed part of the wound. Later the wound healed over the iris. The trachoma was cured.

On March. 7, 1921, I attempted to do an iridectomy behind the inferior edge of the clear cornea, and found the iris in contact with the posterior surface of the cornea, as we expect it in all staphylomata. The incision was made in the sclero-corneal margin, one centimeter long with a cataract knife. Nearly the same incision was made in the iris. On attempting to get the piece of iris out, some vitreous was lost and the operation stopped. Wound was in good condition.



On april 13th, through a very small four millimeter incision at the right outer limbus, a very small piece of iris was removed. Then with a hook I succeeded in getting out a larger piece. There was no hemorrhage. Now, five days later, she is able to distinguish objects more accurately and able to get about more comfortably.

A staphyloma starts anytime in life and is a bulging or giving away of the coats of the eyeball. It is most common at the limbus. Here we are dealing with the results of trachomatous ulcers. At one perforation there is a synechia holding the iris to the cornea. The canal of Schlemm is closed and the resulting increased intra-ocular pressure caused the bulging.

In this case we have been encouraged by the fact that the patient has always had good light projection. So the nerve is probably in good condition.

**Dr. D. D. Mc Henry:** *A Case of Restoration of Socket for Artificial Eye.*

Mrs. X, age 40, presented an entirely different problem a few weeks ago. Thirty-five years ago she lost the right eye in an accident, falling on edge of a bucket. At the same time the lower lid was injured. Dr Harper, of Chicago, did some plastic work on the lid and socket, in the way of skin grafting. She has been wearing an artificial eye for nine years. The lid has become adherent to the socket gradually, and from time to time it has been necessary for the patient to change the size of the artificial eye. She came to me complaining of a filling-up of the socket, thinking it might possibly be a new growth. Under general anaesthetic, I dissected up under the lids and between them and the stump, and did a Thiersch graft over a dental composition splint. I then sutured the lids together over the splint. That was ten days ago. I removed the dressings this morning and find the results very good.

### Discussion

**Dr. E. S. Ferguson:** I have little to say, except to congratulate Dr. McHenry upon his results in the last case. It looks as if it is going to do all he expected. In the case of the Indian woman he had nothing to work on. All one could hope for was to give enough light so that the patient could get around. It is a difficult job well done. It is not easy for you men who are not doing this kind of work to understand the difficulty in operating these cases. These cases are distressing. It impresses the importance of taking care of granulated lids. The majority of these cases are neglected cases.

**Dr. Curt VonWedel:** I am glad to see the last case. In grafting on a dental composition

one must have a good lining. The principal of the mold is that it furnishes good apposition. The grafts die from lack of nourishment and coaptation. Ivey has done considerable work in making angles of noses. He makes the dental composition in one large piece, and irrigates with Dakin's solution previous to operation. As a rule it is best to leave the plate in as long as there is no danger from infection. Blair has done some work with large grafts and pedicle grafts. The Thiersch graft on a dental composition basis is comparatively new.

**Dr. D. D. McHenry,** closing: I have nothing further to say about the first case. Regarding skin-grafting, there have recently been two new things done: the epithelium inlay by Weiner, of St. Louis, and skin-grafting of the antrum, brought to my attention by Ferris Smith, of Grand Rapids.

**Dr. M. Smith:** *A Case of Vesicle Calculus.*

Mrs. X, age 62, a ranch-woman of southern Texas, began to have urinary retention twelve years ago. There has been no history of renal calculus. She has had intermittent bladder pains since the onset, until two years ago. Since that time the pain has been constant, and she has suffered painful and frequent urination. Last November the patient delivered, herself, through the vagina, a calculus weighing three ounces, of the phosphate or carbonate type. Following this she had a vesico-vaginal fistula, but has been apparently perfectly well. I wish to report this case more as a novelty. This is the only case that I have known about in which the patient has rid herself of such a large bladder stone. Two years ago I advised removal, which could have been done nicely under local anaesthesia.

"A stone in the bladder is a concretion which the bladder is unable to expel per urethram and which therefore requires surgical interference for its removal.

**"Physical and Chemical Characteristics:** These concretions may be classified according to the principal calcareous ingredient which enters into their composition, and may be divided into the following groups: 1. Uric acid stones, composed of uric acid and the acid urates. 2. Oxalic acid stones, composed of oxalate of lime. 3. Phosphatic stones, which contain alkaline phosphates and carbonates, not infrequently combined with urate ammonia.

"Certain other organic substances which are found in the urine sometimes exist in sufficient amounts to form calculi. Cystin is the most common of these. Xanthin and indican calculi have been reported. Masses of cholesterol and fibrin have been observed. Hematin and urinary coloring-matters are also found in stones; usually in inconspicuous quantities. These rare constituents of urinary cal-

culi have interest in connection with biologic chemistry, but are so infrequent as to have little practical importance.

"If the calcareous parts are dissolved out of a stone, an albuminous mass is left which preserves the shape of the stone. This basic substance exists in all calculi and serves as a frame work in which the salts are deposited. Cystin stones have less of this albuminoid basis than the other urinary calculi.

"The investigations of Rainey, Harting, Ord, Ebstein, and others have shown the importance of this mucoid skeleton of albuminous matrix in which the stone is deposited. These observers have shown that when colloid or albuminoid substances are added to solutions of crystalline salts a change takes place in the crystallization of these salts. They develop in such media and have a tendency to deposit in spheroidal shapes and to coalesce in rounded forms. This tendency was called by Rainey the law of "Molecular coalescence", and the importance of it in controlling the formation of urinary concretions is obvious.

"The albuminoid material necessary for stone formation may be supplied by pus, blood, or by bits of necrotic tissue. As these materials are supplied by the walls of the urinary passages, it would seem that some irritation of these passages must precede the formation of calculus.

"If granulation tissue forms in the bladder, its surface secreting albuminous material is a favorable nidus for the deposit of calcareous salts. The surface of a tumor acts often in a similar way to set into operation the formation of a stone.

"The concretion when started acts as an irritant to the bladder wall and so continues to be supplied with an albuminoid envelope in which successive layers of spheroidal crystals are deposited. On a cross-section of a stone may be seen the concentric layers of which it is composed. The compactness of the different layers also varies considerably even when the constituents are tolerably uniform.

"Inspection of such a section will show also an indistinct striation radiating from the center out through the concentric rings. This arrangement makes distinct lines of cleavage, which we shall find of some practical importance when we discuss the subject of spontaneous fracture of stone.

"**Color:** Stones vary in color according to their constitution. Uric acid and the urates are yellow or yellowish red. Oxalate of lime is brown or gray in color, often so dark as to be practically black. Phosphates and carbonates are white, shading off into gray.

"**Consistence:** Urinary stones vary greatly in their degree of hardness. Oxalate of lime stones are very hard, requiring great force to crush them. Stones made up of urates are somewhat less hard; then come stones containing carbonates and phosphates, and among the softest stones are those consisting of pure uric acid.

"In some stones the deposit of earthy salts is very scanty and the calculus is little more than a soft mass of mortar. Rarely we see concretions in which the earthy portions are almost wholly absent and the successive layers are made of tough coagulated albuminous material. These albuminoid masses are sometimes of considerable size, reaching a diameter of two inches or more. Soft layers interposed between harder layers greatly weaken the resistance of the stone to crushing instruments.

"**Etiology:** In considering the circumstances that lead to stone formation we have two sets of causes to investigate.

First: The general condition and tendencies diathetic and otherwise, and induce the overproduction in the system of the materials which are deposited from the urine in the shape of calculi; and,

Secondly: Certain local conditions which favor the disposition of these solids out of the urine.

"**Diet and Habit:** The influence of diet and habits of life upon the excretion of uric acid and oxalate of lime is unquestioned. Thus, the customs of a people, their ways of living, and their choice of food, may have a decided influence on the frequency of stone among them. Uric acid and oxalate of lime are often found abundantly in the urine of poorly nourished children, in whom the process of digestion and that of oxidation of tissues are imperfectly accomplished; also in older individuals who take large quantities of nitrogenous food, and whose functions are sluggishly performed. It is therefore in these two classes that acid stones most commonly form. Thompson has pointed out the fact that stone is common among the children of the poor while among the rich it spares the children and appears among the old men. This observation refers only to primary calculi; for secondary calculi, due to fermentation of the urine are more common among the aged poor, who pay but little regard to a modest cystitis. In the case of oxalate lime, its appearance in the urine may come about in a way even more direct, for the ingestion of certain articles of food that contain vegetable acids abundantly often leads at once to the disposition of large amounts of oxalate of lime in the urine. Chismore has found oxalate of lime stones disproportionately

abundantly on the Pacific Coast of North America, and is inclined to ascribe this to the fruit-eating habits of the people.

**"Alkaline Fermentation:** In chronic cystitis, sooner or later the urine becomes alkaline and throws down crystals of triple phosphates and other alkaline salts. The condition that specially favors alkaline fermentations is partial retention (residual urine). This is usually the result of some obstruction by enlarged prostate or stricture. Rarely atony of the bladder leads to the same condition. An obstruction favors stone formation not only by causing alkaline fermentation but also by retaining crystals or small concretions which healthy bladder would be able to expel.

**"Symptomatology:** If a stone in the bladder forms upon a renal stone which has found its way down through the ureter, we have a history of renal colic, followed later by gradually increasing vesical irritation. A stone which forms primarily in the bladder may reach a considerable size before it gives rise to symptoms which call attention to its presence. On the other hand, a very small stone may cause so much irritation as to give rise to aggravated symptoms.

"It is rare to see a case of stone exhibiting all of the characteristic symptoms. Some of them are usually quite pronounced, while others may be absent or but slightly noticed" (From Keen's Surgery).

In this case section of the stone showed no foreign body nucleus, but some evidence of the nucleus having been formed by an albumoid material.

### Discussion

*Dr. H. Reed:* My experience with stone in the bladder in the female has been limited to foreign bodies in the beginning. On the other hand that which is most conducive to the formation in the male, we also find in the female. By that I mean cystitis. However, I have not found stones more prevalent in the female, who is more prone to cystitis than the male. We find bladder calculus in the male associated with cystitis. In the instances that I have seen in the aged male, with obstruction, by far the most of them have been associated with enlargement of the prostate. I am glad to hear Dr. Smith give an explanation of the formation. First of all there must be a beginning. I have seen concretions following operations, the suture material forming the beginning. There must be something in the food or water which predisposes or contributes to the formation. The bladder stones are seen more frequently in the southwest.

*Dr. J. W. Riley:* There have been several important points mentioned in regard to cal-

culus, especially infection. Many bladder infections do not develop stones. There must be something beside infection. It is described by some as a deposit of normal urinary salts from a supersaturated urine. The formation of the oyster's shell is a good demonstration as to the possibility as to the method of calculus formation—from the albuminous coat and the salts of the sea-water. Certain families seem to have a tendency to bladder calculus formation. Its frequency has been noted among the Chinese. Oschner in his after-treatment made use of the theory of the formation from the salts in drinking water, in requesting the patient to drink only distilled water. In all of my cases of bladder stone in the female, except one, a foreign body served as a nucleus.

*Dr. Lea A. Riely:* I believe a study of the metabolism should be made in these cases. In gouty cases the uric acid content is higher than in others. Uric acid mal-proportion is the first to show in kidney involvement. We see deposits in the pericardium in Pick's disease. We see calcareous deposits in tuberculosis. Cholesterol often forms the nidus in gall-bladder trouble, in which cases we find a high blood cholesterol content.

*Dr. LeRoy Long:* I believe bacteria are back of calculus formation. Lippa, a Frenchman, called attention to this in regard to salivary calculi forty years ago. Several authorities later mentioned the probability of such an etiology in regard to gall stones, as laid down at that time, and without dispute. Whether in kidneys, gall-bladder, or elsewhere there must be conditions that lead to the formation of a center. It seems pretty clear that metabolism has a great deal to do with calculus formation. I can see no reason why water saturated with salts would not have something to do with such a condition. I am thoroughly in accord with the other ideas.

*Dr. S. R. Cunningham:* I do not believe that a person inherits a diathesis for such a condition. It depends more upon the surroundings of the individual.

*Dr. A. K. West:* The constituents of the fluids from the liver and kidneys vary from time to time, and with food and water. In the cases of mulberry and uric acid stones the urine is always acid. If we stop the acidity we get a chalk deposit instead of stopping stone formation. The process is the same as seen utilized in making of rock candy—the string forming the nucleus about which the crystals form. I maintain that there is not much in the metabolism or water theories; we are all able to produce stones. Bacteria are not the only sources of a nucleus. Any foreign body may serve. After the presence of a nucleus it is not necessary to assume an error in metabolism.



*Dr. W. M. Taylor:* We find the bladder calculi more common in some sections than in others. I feel that the water supply must bear some relation. In the last six months I have had two cases of vesicle calculus in children, three and five years of age, born and reared in this state.

*Dr. M. Smith, closing:* I have nothing further to say.

## PROCEEDINGS OF OKLAHOMA CITY CLINIC, "ROUND TABLE," WESLEY HOSPITAL

**Dr. J. Z. Mraz:** *Two Instructive Cases of Kidney Infection.*

Case No. 7311. Male, age 45. Family and personal history negative. Present illness, for past fifteen years has had at irregular intervals, attacks of chills, fever and sweats, usually recurring daily, and lasting a week or ten days. Between attacks patient enjoys reasonably good health. Temperature ranges as high as 106° F.

April 15, 1921: Leucocytes 13,200. Smear negative for malaria. Another blood count a month later shows Leucocytes 15,200. Smear again negative for malaria. Routine urine analysis shows gross amount of pus. No urinary symptoms at any time and patient is now able to be up and attend to his business altho there has been a weight loss the past few months of about 20 pounds.

Physical examination: negative except as follows: lower margin of liver about three finger breadths below costal margin. In left hypochondrium is palpable a smooth, more or less fixed mass which extends five to six inches below ribs and which apparently can be traced upward under costal margin. This mass, which is only slightly sensitive to pressure is thought to be spleen because of its position, shape and lack of mobility. Solely because of the finding of pus in the urine his physician, Dr. Rosenberger, referred him for cystoscopic work-out.

*Cystoscopy:* Bladder capacity 225 C. C.'s. Bladder wall trabeculated throughout and moderately congested. Moderate enlargement of middle lobe of prostate. Right orifice normal. Left small and round. Right ureter catheterized with ease. Left ureter accommodates a number five catheter with great difficulty. Right kidney secreting very freely a normal appearing urine. No urine from left P. S. P. Test—Color appears in right in three minutes, a 15 minute quantitative test shows 30 per cent of the dye.

Pyelography of left kidney—34cc's of sodium bromide sol., injected before any pain is complained of. Upon attempting to recover the

injected solution about 10cc's of a very thick pureulent looking material is obtained and is thought to be thick pus which flowed through the catheter because of its dilution with the sodium bromide sol. The microscope confirms this. Pyelogram shows a large distorted left kidney and ureter. Kidney lies just above iliac crest. Examination and culture of right urine negative. The pus from left kidney is shown by culture to contain staphylococic predominantly. The fluid obtained from the left kidney does not contain even a trace of the dye when tested with sodium hydroxide solution. Here, then, is a case of kidney infection which travels through all the successive stages to apparently complete destruction of all secreting kidney tissue without once producing a symptom pointing definitely to the kidney as the cause of the patient's disability. The symptoms and course of the disease simulated malaria closely and the finding of what resembled a large spleen made the similarity the more striking. If the patient comes to operation, the mass will probably be found to be a large kidney fixed in a low position by perinephritic changes. A routine or urinalysis made years ago would no doubt have put the doctor on the right track and possibly have led to the saving of the kidney.

2nd. Case No. 7312: Female, age 40. Family history: Mother died of T. B. when patient was an infant. Personal history negative except that at 20 she had symptoms of pulmonary tuberculosis, cough, weight loss, and three hemorrhages, from which she apparently recovered completely. Present illness: Began 3½ years ago with dull aching pain in right flank, and lower right abdomen. No fever, chills or nausea at this time. Diagnosed appendicitis, and appendix removed without any improvement in symptoms. At no time has there been any urinary symptoms until three weeks ago. Since then she has suffered with irregular fever, general toxic symptoms and urinary frequency. No hematuria.

Physical examination: negative except for tenderness in right abdomen, especially in gall bladder region and in right lumbar region.

*Urinalysis:* Gross amount of pus.

Condition diagnosed cholecystitis, by three doctors. The case was recently seen by Dr. Sackett who requested a cystoscopy.

*Cystoscopy:* Bladder capacity 250 cc's. Mucosa shows small areas of minute ulcers in dome and left right lateral walls. Right orifice edematous and red. A clump of thick pus seen at meatus. Ureters catheterized. An obstruction is encountered in right ureter a little above pelvic brim. This is successfully passed. Right kidney throws out a steady drop a pale

cloudy looking fluid. P. S. P. test, left three minutes—thirty-five per cent in fifteen minutes. Right 23 minutes. Trace in fifteen minutes. Pyelogram of right kidney made after injecting 40 cc's of thorium nitrate solution. Picture shows a very large distorted pelvis, and an immensely dilated ureter measuring an inch in diameter. A stricture is seen in ureter at the point where obstruction was encountered on catheterization.

*Segregated urines:* Right, gross amount of pus. Left negative. Cultures: Right, staphylococci found in right. Left negative.

*Diagnosis:* Before cystoscopy: 1. Appendicitis. 2. Cholecystitis.

After cystoscopy—Pyonephritis, right. Later diagnosis confirmed at operation.

Scrapings from kidney show T. B. bacilli.

These two cases beautifully illustrate, 1st. The difficulty sometimes encountered in diagnosing kidney infections. 2nd. The value of routine uranalysis. 3rd. That in the cystoscope we have an instrument of precision whose value cannot be over estimated.

### SPINA BIFIDA.

#### Dr. A. L. Blesh:

##### Meningocele Operation Recovery Remarks

Patient, male child, eight weeks old. No other deformities such as clubbed feet, paralysis etc. Fretful, crying poorly nourished baby. Mother states that the child cries night and day.

Physical examination shows a fluctuating skin-covered tumor which swells upon straining as large as a half orange in the dorso-lumbar region of the spine. Child resents manipulation or compression of this tumor by crying vigorously. By gentle touch the tip of the index finger can be insinuated into the opening which is a size to barely admit it.

Diagnosis of Spina Bifida with meningocele seems clear in view of the fact that there are no other deformities or paralyses present.

Operation advised and accepted. Operative procedure adapted in this case was a fascia and muscle plastic. The sack was treated exactly as a hernial sac contained no nerve elements. Erector spinal muscle with dorals fascia was slid across the opening from both sides and united by suture in the mid-line.

*Remarks:* It is interesting to note that following operation there was an immediate marked improvement in the general health and that within two weeks the child appeared normal in every way.

The frequent association of hydrocephalus with Spina Bifida, operated or unoperated is to be noted.

*Classification:* 1. Meningocele. 2. Spina Bifida Occulta. 3. Meningo-myelocele. 4. Syringo-myelocele.

Best operative results are obtained in the Meningocele since the nerve elements are not involved.

The second variety is rarely surgical but is often associated with deformities of the lower extremities and visceral and muscular paralyses.

The third variety is surgical but often offers operative difficulties in that the nerve elements are thrust forward and frequently most intimately blended with the sac, the removal of which as in all hernae is necessary to a cure. Very often the fusion of the nerves with the sac is so intimate that dissection is impossible.

The fourth variety presents a protrusion of the membranes and the cord. The distending cerebro-spinal fluid is in the canal of the cord.

The operative difficulties, so far as the nerve structures are concerned, is not so great as in the preceding variety, but owing to pressure atrophic degenerations, paralyses with developmental short comings are pronounced and cannot be improved either with or without operation.

Choice of operation lies between the osteoplastic and the soft tissue plastic for the repair of the defect. The present trend is toward the latter. In the osteo-plastic method the remains of the arches may be utilized or bone may be transferred from other regions of the body.

### CASE OF CEREBRAL SYPHILIS SIMULATING LETHARGIC ENCEPHALITIS

#### Dr. W. W. Rucks:

Mrs H. Housewife, age 45, White. Family history negative; personal history:—Was always well and strong, no severe illness. Menses regular and normal up to last year when they became irregular. No periods for last seven months then a flow for 4 days which has now ceased. Para II youngest child, 7 years old the only one living.

*Previous Illness:* Fairly well up to 7 weeks ago when she began to complain of dizziness and tired easily. Has had considerable headache for the past two years which has increased in frequency and has been intense the last three weeks. More or less delirious most of the time and at times this has become pronounced. Appetite poor, sleeps poorly, considerable loss in weight and strength. Urination normal, bowels constipated.

*Physical Examination:* Patient's gait unsteady, pupils small and respond to light, face pinched expression, lips dry, sordes on teeth, tongue coated, throat red and irritated. Pa-

tient restless, moaning and partially delirious. Glandular system negative. Lungs negative. Heart tones normal. Pulse slow. Bladder distended to within one inch of umbilicus. Right kidney palpable. Pelvis negative except slight retroversion of uterus. Reflexes slightly hyperactive. Babinski slightly positive. Examination of eye grounds, by Dr. Macdonald. Right disc not seen plainly on account of opacity of cornea, left disc shows slight edema.

*Spinal Puncture:* Fluid clear, under marked increase of pressure, cell count 100 globulin strongly positive, Wassermann 4 plus positive in one half and one cc amounts.

*Blood:* White count 14,600, polys 85%, Small lymphs 12%, Transitionals 2%, Eosins 1%.

*Urine:* Sp. gr. 1.010, straw color, reaction neutral, albumen trace, no sugar or indican, no casts blood or pus, occasional leucocyte.

X-ray of skull shows normal Sella Turcica, no erosion of bony plates. Patient was put on intensive anti-syphilitic treatment and showed rapid and continuous improvement. The headache became less severe and the restlessness and delirium and loss of appetite less marked. At first just intravenous treatment were used then combined intravenous and intraspinal. In about a month the treatments had to be stopped entirely because of a severe arsenical nephritis as evidenced by a fair amount of albumen in the urine and a gross number of hyaline and granular casts, with a few red blood cells. In about two weeks this kidney condition cleared up sufficiently so that the treatment could be started again but it was not pushed so strongly this time and the urine was repeatedly examined to catch the first indication of a toxic effect of the arsenic on the kidney, again.

The point of interest in this case from a laboratory standpoint are that the laboratory examination of the blood and spinal fluid giving repeated positive strong Wassermann tests are the two outstanding symptoms that assisted in establishing the diagnosis of Cerebral Syphilis. The cell count of the spinal fluid of 100 is rather high for Lethargic Encephalitis but might be present. The globulin is usually also positive in this latter condition. The clear fluid and increased pressure is present in both conditions. The other clinical symptoms (because laboratory examinations are merely special methods of eliciting clinical symptoms) as continuous severe headache, mental confusion, unsteady gait, low delirium with periods of semi-coma are all very suggestive of both conditions and could point to one as well as to the other.

The rapid improvement of the case under anti-syphilitic treatment was an additional

"therapeutic test" which confirmed our interpretation of the blood and spinal fluid Wassermann as positively syphilitic in this case.

The value of frequent routine urinalyses during the course of treatment was shown in the sudden "shower" of casts that called our attention to the toxic irritation of the kidney caused by the medication.

### Clubfoot In Baby Three Weeks Old

M. E. Stout, Oklahoma City:

I have just put up a clubfoot in a baby three weeks old, which is the ideal age to begin them. I believe that the writer who said that in breech presentation we might begin to correct the feet while we were waiting for the head to be delivered was perhaps a bit radical, but certainly the earlier we start with them the better final result we will obtain, that is provided they are continuously and persistently followed up, and unless this is done we will have a large number of recurrences, regardless of the age and manner of operation adopted.

In these early cases I believe in moulding the foot into the correct position by forceful manipulation and retention by use of plaster cast, reserving tentomies and osteotomies for a later period where they are necessary.

This youngster was anaesthetized and the feet were forcefully manipulated until they assumed a normal position. A light plaster cast was applied and split on top to accommodate for swelling. The baby was kept under observation for five days when they were permitted to go home with instructions to return in four weeks for further manipulation. The foot must be maintained in an over corrected position for some time to prevent recurrence. By careful painstaking work we can promise a cure in practically every case, sufficient to give them a useful foot and in most cases, the deformity can be perfectly corrected.

### FUTURE OF PEDIATRICS

The most important problems which present themselves to the specialist in diseases of children are discussed by Fritz B. Talbot, Boston, (*Journal A. M. A.*, June 26, 1920), from the point of view of (1) the medical schools, (2) the practitioner and (3) the public. Talbot urges that after graduation, every practitioner should apply the principles of the prevention of disease. In those communities in which he is a pioneer, he should organize child welfare stations so that the poor as well as the rich will profit by his knowledge. The public is already prepared for such work and will welcome it, and perhaps demand it. The practitioner need not fear that the application of these principles will decrease his income. On the contrary, although he will treat fewer sick children, he will have an increasing stream of children coming to his doors to be kept well. He will have the satisfaction of knowing that he has played a small part in diminishing suffering, in increasing efficiency, and in preparing the manhood and womanhood of the country for a future emergency.



## PROCEEDINGS OF OKLAHOMA CITY CLINIC, ROUND TABLE, WESLEY HOSPITAL

### Dr. A. L. Blesh:

#### Urethral Caruncle Case Treatment Remarks

Case now in hospital. Rather fleshy female who for several years has been suffering repeated attacks of dysparunia. The first attack was associated with hematuria. Upon careful inquiry however it was ascertained that the blood appeared in strings and was not *mixed uniformly* with the urine, and was *bright red*.

Jolting or jarring from riding or walking is painful. She has been "driven ragged" with the suffering incident to her condition and being a woman of wealth has consulted many reputable physicians who overlooked the real condition for the simple reason that painstaking examinations were not made. Bizarre operations of one kind and another had been proposed.

Simple thorough excision with urethral suture is the treatment. The excision must extend well into the normal mucus membrane and be accurately sutured to prevent contracting, stricturing scar formation in order to secure a good result and prevent recurrence.

*Remarks:* Urethral Caruncle has not received the attention that its importance as a cause of suffering womankind warrants. Many text books on Gynecology do not even mention it. Others dismiss it with a few remarks. Current Gynecological literature rarely mentions it. Yet it is of so great importance that it often sets a woman's entire nervous system agog. The most marvelous and gratifying results, I have seen in surgery has followed the excision of a caruncle which had tortured a patient almost beyond endurance—a thing it is perfectly capable of doing. The growth is of a vascular nature and will return unless the excision extends well into sound tissue. As a rule it does not set upon the margin of the orifice of the urethra but extends some distance up in the canal, therefore the urethra should be well dilated to make the growth surgically accessible and bring it into view.

#### Chronic Fistulas Treated With Bismuth Injections

### M. E. Stout:

The patient presents himself on account of several fistulus tracts radiating in different directions from the hip joint which gives a history beginning fourteen years ago, with pain and very slight lameness. This gradually increased for about four years when an abscess appeared on the outer quadrant of the thigh, which was drained. The wound refused to

heal and continued to drain for some three or four months, when it was reopened and a counter drain inserted on the inner aspect of the thigh. Since this time he has been operated some five or six times in an effort to eradicate the fistulus tracts, which still persisted.

There were four or five openings when he consulted the clinic and the entire right buttock and upper thigh was a mass of scars. Upon injection of any of the fistulas the paste appeared at all the other openings, showing that they communicated.

Beck's Bismuth paste (Bismuth 1 pt. yellow vaseline 2 pts. Mix while boiling.), was injected every third day with sufficient pressure to cause it to appear at each opening. After about three weeks the tract began to diminish in size until the amount of paste required to fill them was much less and at the end of eight weeks they were entirely healed.

Today he consulted me on account of a sunburn incurred while on a swimming party. The wounds have remained healed and he is in the best health he has been for years.

Dr. Beck has written a great deal about the use of bismuth paste in chronic fistulus tracts, but it seems that he has been unsuccessful in convincing the average surgeon of its value.

We have treated a large number of cases similar to this one and in many cases it is far more simple and effective than surgery. Our statistics show about 70% cures, while they are considerably below this in surgery and the advantage is when we fail by the use of the paste, we can always resort to surgery later on.

## CHRONIC ANTRUM INFECTION

### Dr. J. C. MacDonald:

A woman age 28 years came in because of a foul smelling discharge from nose.

About eight months ago she had an upper left bicuspid tooth pulled. There was an abscess at the root of tooth. Soon after she noticed some tenderness over left antrum and a very odiferous discharge from nose. This discharge has been present ever since then but there is very little tenderness over antrum.

Transillumination showed left antrum to be clouded. By placing a needle into antrum and making suction with a syringe, pus was withdrawn. A good sized opening was made into the antrum with a trocar below the inferior turbinate. The antrum was then thoroughly syringed out with chloramine—"I", one percent solution. This has been done three times weekly, the condition has apparently cleared up now as the last two irrigations failed to bring forth any pus.

The patient will be kept under observation

for some time yet, to be sure the condition is entirely cured.

This infection was undoubtedly due to the abscess at root of tooth by direct extension into antrum and has continued present so long because of insufficient drainage.

### STRICTURE OF THE ESOPHAGUS

**Dr. D. D. Paulus:**

Case No. 7515. Female, age 45, Occupation, practical nurse. Family history negative. Usual diseases of childhood. Good recoveries. Never has had any serious illness of any kind. Menstrual history negative.

Present trouble began nine months ago with difficulty in retaining food. Food seemed to pass through esophagus to entrance to stomach and then would regurgitate. Food regurgitate found in practically same condition as when swallowed. Often felt sensation of pressure under lower end of sternum and in epigastrium. No distress in stomach. First only solid foods were regurgitated but now she is unable to retain liquids. For the last three or four months has been somewhat tender in epigastrium just below tip of sternum. This has been more pronounced the past week.

During the past five days has been unable to retain even liquids. When food taken has "painful contraction in epigastrium, of gripping nature". Never has noticed any bloody vomitus or vomitus of coffee ground color. Ordinary weight 136. Now weighs 100 pounds.

*Physicial Examination:* Eyes—pupils negative. Tongue coated. Fetid odor to breath. Throat negative. Teeth not in good condition. Pyorrhea. Glandular system negative. Pulse 96. Temperature 100.—(Starvation temperature). Chest negative. Heart shows systolic murmur heard over entire precordia. Borders normal. Abdomen—moderate tenderness in epigastrium. No tumor mass palpable. Liver and spleen are not palpable. Extremities negative. Reflexes O. K. Blood pressure 145-180.

Urine analysis sp. gr. 1020. Albumen large amount. Sugar and Indican negative. Microscopic show many pus cells. No casts. Catheterized specimen negative. X-ray shows stricture at cardiac end of stomach. Only very small portion of barium meal passed into stomach during fluoroscopic examination. Plate shows no ragged edges to barium shadow in esophagus. Considerable dilatation above stricture. Shadow outline of lower end of esophagus fusiform in character. Blood Wassermann four plus positive. Spinal puncture was made. Fluid under moderate pressure. Cell count three. Globulin negative. Wassermann negative.

This case when first seen was thought to be a carcinoma of the cardiac end of the stomach,

but the positive blood demanded at least a therapeutic test. Because of the associated spasms which is usually present with stricture, she was immediately given atropine sulphate hypodermically in heroic doses. On second day after commencing atropine she was able to retain liquids and cereal foods. Tincture of belladonae and benzyl benzoate were then given by mouth. She was also given potassium iodide in increasing doses and neo salvarsan intravenously.

Patient expressed a strong desire against having sounds passed to dilate the stricture and left the hospital on the tenth day. Five weeks after beginning treatments she reported back that she has been able to eat solid food since she left the hospital and has been able to retain all food and is regaining rapidly her strength and weight.

How are we to interpret the findings in her case? Is it a gumatous infiltration of esophagus with added cardiac spasm, or is it a simple case of cardio spasm with merely the syphilis as an incidental finding? If she returns for further observation another fluoroscopic examination may aid us in a further study of this condition.

I can recall two cases that came to the clinic for a similar condition, that is stricture of esophagus with positive Wassermann. Both of them are apparently cured by antisyphilitic treatment. One case occurred in 1917. She is perfectly well today. Another in 1919, who also has had no trouble.

Syphilis as a cause of stricture of esophagus is extremely rare. But a few lines are devoted to it in the text books on pathology and clinical medicine. Practically no reference has been made to it in the current literature for a number of years. Yet I believe this not to be of such a rare occurrence if one is on the alert for it. Cardio spasm per se is relatively a much more common condition as the records of our cases for the past five years show. The history and the findings in cardio spasms are somewhat different and usually present no great difficulty in diagnosis, especially with the aid of the fluoroscope and the esophagoscope.

### TUBERCULOSIS OF THE KIDNEY

**W. W. Rucks**

Case No. 6554. Male, age 48: Dentist.

This patient was first seen by me in his home town in the early spring of 1919. At that time he presented the usual symptoms attendant upon an acute infection of the chest. He had been fishing, spent the night on the river bank sleeping on the damp ground. States that he took cold, had a chill followed by fever and a pain in his left chest. This condition had

been in progress about a week when I saw him and a diagnosis of pleurisy with effusion was made, which was confirmed by chest puncture. A week later he was sent to Wesley Hospital where he remained for a period of five weeks running a moderately high temperature and on three occasions it was necessary to aspirate a large amount of fluid from the left pleural cavity. This fluid was amber color and cultured negatively.

Convalescence was slow. The remainder of the summer was spent in rest and in light outdoor exercise in Colorado. On his return in the fall, a chest examination revealed dullness at the base of the left lung and many crepitant rales. However, he had gained much in weight and strength and returned to his work.

He was seen again in the spring of 1920 and the same physical signs. Again went to Colorado for the summer, gaining both in weight and good feeling. Resumed his work for the winter which he continued until March 1, 1921, when he came to Wesley Hospital complaining of fatigue, backache, especially at night and at times very severe. Also stated that he had been running an irregular temperature. A general physical examination revealed the same chest findings but this was not thought sufficient to cause the severe backache.

March 3, 1920, Urinalysis—acid reaction. Slight amount of albumen. No sugar. No indican. No casts, but many red blood cells and pus cells.

March 22, sputum negative for tuberculosis and on this date urine was heavy in albumin with many pus cells and red blood cells.

Wassermann negative.

Blood chemistry—glucose .071. NPN 19.8 Urea Nitrogen 14.1 Creatinine .09.

Patient complaining very bitterly of the pain in his back which at times he finds intolerable, requiring sedatives at night in order that he may have some rest. Believing that the three major causes for backache are fibrositis (lumbago), spondylitis and pathology in the pelvis preceeding this. X-ray of lumbar vertebrae revealed no evidence of spondylitis.

Cystoscopic examination was refused by patient—but a guinea pig was injected with his urine. Also tonsils which were quite infected were removed by Dr. Macdonald, after which he returned home.

Patient returned to hospital on May 7th, 1921, with the pain in his back as the chief complaint. Spondylitis and fibrositis had already been eliminated, so at this time the urinary tract was given special attention. Urinalysis showed the urine to contain albumin, pus and blood. A cystoscopic examination was made by Dr. Mraz with the following report: No

ureteral strictures but had some difficulty in passing through vesical sphincter. Bladder wall trabeculated throughout except in trigone. Bladder capacity 200 c.c. One half inch beyond left orifice is seen a round opening about  $\frac{1}{4}$  inch in diameter apparently opening into a diverticulum into which a ureter catheter can be fed. Right orifice very difficult to locate because its site is occupied by a rounded mass which has the appearance of a cyst of the lower end of ureter. Ureters catheterized. Urines collected and cultured. P. S. P. test within normal limits. Pyelogram of the right kidney shows normal size and shaped kidney pelvis.

Mosenthal kidney function test, shows a variation in specific gravity and an increase in night urine which is indicative of kidney irritation.

Guinea pig posted and found to have tubercles in lungs and liver, also glandular involvement.

Here we have a patient whose principal and most distressing symptom is backache. This patient undoubtedly has a chronic pulmonary tuberculosis infection. His backache is neither due to disease in the vertebrae nor to lumbago. Removing infected tonsils gave no relief. General improvement from rest and food and open air living gave no relief from the pain, but on the other hand it continued to grow worse. Urinalysis persistently showed pus and blood. Cystoscopic findings in the bladder alone are sufficient cause for backache. Ureteral catheterization shows the pus and blood to be coming from the right kidney. This definite pathology coupled with the tuberculous findings in the inoculated pig, is sufficient I think, to justify a diagnosis in this case of Tuberculosis of the Right Kidney.

#### SPINA BIFIDA OCCULTA

A case of spina bifida occulta in a child with incontinence of urine and feces is recorded by J. S. Leopold, New York, (*Journal A. M. A.*, Feb. 14, 1920). Since reading Brickner's article in the American Journal of the Medical Sciences, in which he defines spina bifida or bifid spine, whenever there is a cleft, whether or not it shows externally, the author has followed a routine of having a roentgen ray examination made of the spine in all children coming under his care presenting incontinence of urine. A case of a girl, 6 years old, in whom the incontinence commenced about one year prior to admission, is reported. In other respects the child seemed normal as well developed and her general health was good. Suspicion of spina bifida was aroused by the history of the case, and the existence of a small dimple over the sacrum. The operation confirmed the diagnosis, showing a cleft in the laminal arch of the first sacral vertebra. The remaining sacral arches were practically absent, the defect increasing toward the anus. There was no hernia of the cauda equina. It is difficult to explain the effects of the operation, namely, control of the bladder function with loss of control of the rectum. The suggestion is made that possibly the fixed scarlike dimple in the skin over the bifid spine caused a tug on the membranous posterior wall of the sacral canal, affecting some of the roots of the cauda equina. There is one illustration



PROCEEDINGS OF UNIVERSITY  
HOSPITAL CLINICAL  
SOCIETY

Oklahoma City

May 6, 1921

Dr. W. M. TAYLOR: *Infantile Scurvy*

Case No. 13177. Baby F. C. Age 1 year. Male. Admitted to Pediatric service April 28, 1921. Family history not attainable. Personal history: Pneumonia at 10 months, with complete recovery. No other illness till the present. Breast fed for first 5 days of life, then on malted milk alone until present illness began 3 weeks ago. At this time nurse noticed the gums about upper incisors bled easily. One week later baby cried when napkins were changed or when taken up.

Physical examination: On admission to hospital examination showed pale, fairly well nourished male child. Head and pillow about head wet with perspiration. Child lies perfectly still, his thighs semi-flexed and knees rotated outward, uses arms freely. Cries when bed is approached. On being disturbed his heart action would reach 130-140 per minute and respiration 40-50 per minute. Anterior fontanella was closed. Examination of mouth showed slightly coated tongue, gums about upper incisors spongy and purplish in color. Bled easily on pressure. Distinct beading of ribs at costo-chondral junction evident to eye and on palpation and lower ribs flaring. Some small ecchymotic spots on either side of spine in dorsal region with the history that he had endured a few chiropractic manipulations. In the region of the lower epiphysis of both femurs were symmetrical swellings more marked on outer aspect, very painful on pressure but not reddened. Slight tenderness over the lower ends of both tibiae but little swelling. The history of continued feeding of proprietary food alone, together with the spongy, purplish, easily bleeding gums—the swellings from sub-periosteal hemorrhages over femur and tibia, gives us a very clear picture of one of the so-called deficiency diseases—namely scurvy. The head sweating, the beading of the ribs with their outward flaring show unmistakable evidence of rickets, a condition frequently associated with infantile scurvy. Blood picture showed only secondary anemia.

The diagnosis being scurvy associated with rickets.

Treatment consisted of the administration of orange juice (1 oz.) daily and skimmed un-boiled milk with cereal. Within ten days had shown marked improvement. The swelling over the epiphyses is not reduced but the pain has practically disappeared and the baby has

changed from an irritable, crying baby to one bright and happy, and is handled without pain. No cod liver oil has been given for the rickets, deferring its administration till the acute condition and the digestive capacity will permit its use for in these cases the digestive capacity is so reduced that changes in diet should be made guardedly. This is the second case of scrobutus seen in the hospital during the past six months. The previous case had been fed on condensed milk continuously for nine months. In addition to the text book picture we showed a very unusual symptom—namely ecchymosis of upper and lower lid with marked protrusion of left eye due to hemorrhage into the orbit.

The diagnosis of these two cases is made more conclusive by the fact that both of the babies showed prompt improvement with no other medication than orange juice and fresh milk modified to suit the digestive capacity.

#### INFANT'S FOOD

At present too little attention is given to the reaction of the milk preparations fed to babies, according to A. F. Hess and L. J. Unger, New York (*Journal A. M. A.*, Nov. 1, 1919). The textbooks on children's diseases content themselves with a statement of the protein, fat and carbohydrate content, giving no attention whatever to their reaction, and it is quite immaterial, for example, whether sodium bicarbonate is added to the food or is contained in the proprietary mixture used. It is impossible at the present time to say just what an addition of alkali does, but that it has a decided effect on the vitamins can be proved. In a previous article the authors have shown that orange juice, the prototype of antiscorbutics, and the one most relied on in infant feeding, is essentially affected within twenty-four hours by being rendered twentieth normal alkaline to phenolphthalein, and orange juice of this faintly alkaline reaction was found to have lost its power to protect guinea-pigs against scurvy. The subject was forced on their attention by finding that milk formulas containing malt soup have an exceptional tendency to bring on scurvy in babies unless an antiscorbutic like orange juice or canned tomato is added to the dietary. This might be attributed, they say, to the following conditions: "(1) that the formulas contain an amount of milk insufficient to protect fully; (2) that the preparation is boiled as well as frequently prepared from pasteurized milk; (3) that there is a period of aging between the initial pasteurization and the boiling of the milk and the flour; (4) that an alkali is contained in the malt soup, and finally (5) that a considerable amount of carbohydrates in the form of flour and of malt sugar, is added to the food." It therefore seemed important to determine which factor was at fault. A baby being fed with malt soup and cereal with the addition of three teaspoonfuls of cod liver oil daily, developed scurvy. To cure this by eliminating the carbohydrates from the diet, a pint of milk was prepared with the addition of sucrose and the same amount of potassium carbonate as was contained in the malt soup formula. The milk was good, containing no malt or flour, and was boiled for five minutes. The exclusion of these did not relieve the symptoms, so that the potassium carbonate was discontinued and the result was striking. The baby gained in weight with disappearance of the scorbutic symptoms and a general improvement. A similar experiment was tried on guinea-pigs and confirmed the results. The authors say that it is clear that the antiscorbutic vitamins in milk are rapidly destroyed by alkalization, and they raise the question whether other vitamins may not also be thus affected.

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Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

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### EDITORIAL

## PHYSICIANS AND THE OCCUPATION TAX

Several inquiries have recently been received by the JOURNAL with reference to the right of municipalities to levy an occupation or license tax upon physicians. We noted in the July issue that one of our members, rather than submit to what he considered a wrong and as discrimination against his profession, had undergone arrest, refused to pay the town of Slick such tax, had appealed the case (he was fined under the ordinance) to the District Court, from whence, if it went adversely to him, the matter would be appealed to the Supreme Court.

With this situation in mind, your Secretary asked the Attorney General's Office for an opinion, if such could be obtained. The reply of that office, written by Honorable Elmer L.

Fulton, Assistant, states that the office is prohibited by statute from advising anyone except county attorneys and the different state officials therefore an opinion could not be given. Mr. Fulton, however, expressed his unofficial, personal opinion to the effect that such tax may be legally assessed. He cited Section 681, Revised Laws of Oklahoma, 1910, as follows:

"provides that town officers shall have authority to levy and collect a license tax on a large class of professions, which includes doctors, and we are further of the opinion that the legislature has authority to grant such power."

If this opinion is correct, that ends the matter. However, it should not be forgotten that the usual city ordinance is so poorly drawn, contains so many loopholes inviting attack that most of them have been held void for one reason or other. One of the commonest pitfalls in their creation is that they actually discriminate in that they arbitrarily name a class, incidentally exempting others more favored, so that the whole structure falls in the face of intelligent attack as to validity.

## SYMPOSIUM ON OBSTETRICS

Dr. George Clark Mosher, Kansas City, member of the Council on Medical Education, Missouri State Medical Association, proposes a Post Graduate Day in Obstetrics for District Medical Societies in the Southwest. Initial or organization session has already been held at a recent meeting of the North Missouri District Society, Brookfield. Papers by specialists covering points in obstetrics were read and a Forum was held at which many topics and discussions incident to obstetrical problems were considered.

The program was offered by the following Drs. F. E. Wilhelm, Geo. F. Pendleton, Geo. C. Mosher, Burford B. Hamilton, C. A. Ritter, A. W. McAlester Jr., and Howard Hill. The Forum offered "Potters Version", "Indications for Cesarean Section", "Use and Abuse of Pituitrin", "Scopolamin in the Light of Experience", "Treatment of Post-Partum Hemorrhage" and the "Third Stage of Labor".

Dr. Mosher, who many of us of the Southwest remember as our aid and efficient light in the days we devoted to student endeavor, voices the hope that this move may stimulate other organizations for the study of obstetrical subjects. We have plenty of justification in Oklahoma to organize such bodies for the study and improvement of that much neglected, slurred over part of our duty, the handling of the expectant, parturient mother.



## THE SHEPPARD-TOWNER MATERNITY BILL

The well known attitude of the medical profession to aid every proper movement tending to limit and lessen human suffering is too well known to have the almost unanimous objections they are voicing against enactment into law of the Sheppard-Towner Bill, misunderstood. They have never been found objecting to betterment in any particular simply because it meant lessend income. Ours is indeed the only known "Union" or "Trust" that is what our enemies dub us- which has ever been found in the ranks of those who would, if possible, absolutely prohibit disease. The Sheppard-Towner Bill is objected to by our profession for too many reasons to enumerate here. The fact that our profession is a unit against it should cause those attempting to steer it through Congress and into law, to sit up and take notice. The enthusiasts in charge, admitting they are honest as to intention, do not realize what a dangerous toy they have taken up. That the law is "loaded" with dangerous possibilites goes without saying. The first great, and it should be sufficient objection, lies in the belief that it is opposed to the principles of our Constitution. It was never intended that the National Government should go into the paternalistic, house to house business of the practice of medicine, even a state or municipality with more legal right to do so than Congress hardly dares go that far. It charges with the responsibility, non-medical persons to direct medical matters. We have already had too much of the Secretaries of the Treasury and Agriculture dabbling in medical matters. It encourages, indirectly, increased laziness and helplessness in the individual, in a country made great by the right to follow ones own inclinations, in his own way, so long as he interferes not with others. Just as sure as you make a thing of value free or nearly so to the individual, he is surely made less inclined to help himself to procure that same thing of value by his own effort, is encouraged to lean on others thus doubling their load. The Sheppard-Towner Bill is the creation of hysteria, the desire to nose into other peoples affairs, to pose as philanthropists and uplifters, always at the other fellows expense. If the Federal Government sets this precedence of going into private vocations and practices medicine for the people we have the right to demand that some of the strain be taken from our shoulders, that our law be practiced for us by Federal appointees or beaurocrats, that our religion be handed down by office holders, that our mechanical needs be supplied at reduced rates or free at the other fellows expense, but the last word of criticism is not said until it is pointed

that the whole process makes for a lowering of efficiency standards, the rendition of inferior service, creation of jobs and positions for those who, as a rule, cannot face the keen competition to be met in the maelstrom of public life.

Dr. John A. O'Reilly, Brooklyn, N. Y. has issued to the medical profession a circular letter which goes at the bottom of this matter, and some of it will be reproduced here in order that Oklahoma doctors may be advised of the peril of the case and that he promptly urge his Congressional representative to oppose the bill. This should be done by every physician, for the complaint is constantly made against us that we are silent and allow these things to go by default, that the lawmaker has no guide except those who undertake to advise him, that things might be otherwise had he been duly and timely informed. Dr. O'Reilly says "When Presidents, Senators and Congressman are sick to whom do they turn for advice and counsel and help? To the Professional Philanthropist? To the false Doctrinaire? To the Political Patronagist? NOT AT ALL; they turn, pleadingly and fearsomely, but confidently TO THE DOCTORS; THAT'S COMMON SENSE". When the Nation is sick with unrest and the Apostles of Disorder,-the American Association for Labor Legislation, the Rand School, the New York League of Woman Voters, the Birth Control Leagues, etc. etc. "leagues without end", and similar vicious organizations, are germinating miscalled Public Welfare Bills which threaten the economic independence, domestic privacy, self-reliance and self-respect of the People of this Nation and tend to convert American Wives into Broodmares for the purpose of the Birth Controllists, to whom do Presidents, Senators and Congressmen turn? To the doctor? not at all; That's political sense, Why? Because they know in their hearts that the doctor, by reason of the nature of his education and training, is the best qualified teacher in society; and, by reason of the intimacy and sanctity of his relations with his patients, the most forceful teacher of society; and, by reason of his devotion to self-sacrifice, the best beloved of society..... They also know that the doctors, as a class, are innocuous because they have no political punch."

"The Sheppard-Towner Bill was passed by the Senate, the doctors, who have the right par excellence, to be heard were side-tracked for a lot of social sob sisters of the League for Women Voters."

The Bill is now in the House, in Committee on Interstate and Foreign Commerce, Hon. Samuel E. Winslow, Chairman. Protests from Oklahomans should be mailed in duplicate,



one to your Congressman, the other to Chairman Winslow. No protest should contain the argument, worse than none, that this Bill is against the interests of the doctor. That phase of it is the least of all, but it is against the interests of the American Citizen and of our vital concern in that it proposes to do something that only skilled, highly qualified physicians may do. Legislating that function into some other person or class is too absurd to be considered a moment by any thinking person. It should be a matter of congratulation that up to now, probably the most potent force against this measure in Congress is Honorable Miss Alice Robertson, Muskogee Congresswoman. Miss Robertson, herself a highly trained observer, of wide mentality and experience, familiar with many great National problems, certainly able to see farther into a subject than most women, who acts fearlessly and undeterred by possible consequences, so long as she believes she is right, has brought down the wrath and criticism of many thoughtless, hysterical Oklahoma women upon her head because she has seen through the pitfalls of this proposed law and opposes it. Miss Robertson takes the position that the Constitution of the United States is a reverential document, that we should live up to the spirit of it in all things, certainly not try to evade its limitations by enactment of foolish legislation.

#### PRESENT STATUS OF THE OKLAHOMA ANTI-BLINDNESS LAW

State Commissioner of Health, Lewis has asked the Journal to accentuate certain facts possibly not understood by the rank and file of our profession as to Ophthalmia Neonatorum Law of Oklahoma.

The law, in the main, requires this of the physician: or midwife:

Immediate instillation into the eyes of newborn, a 1% solution of silver, or such other effective preventative as may be preferred. The State Board of Health will undertake to furnish ampoules of the preventative, though in the interim, any sort of solution known to be effective may be used, but absence of the ampoules will excuse no physician from arrest and punishment should he fail in such instillation.

Section 4 of the law is as follows:

"Every physician or midwife shall, in making a report of a birth, state whether or not the above solution (Silver Nitrate 1%) was instilled into the eyes of said infant".

The Commissioner will furnish supplies to institutions and those known to be doing obstetrical work, but as the legislature made meagre and insufficient appropriations to ex-

ecute its demands and economy must be the rule of the day, the ampoules will only be sent those physicians making application for them. Requests from physicians will be attended to at once.

#### SOUTHWESTERN-BELL TELEPHONE'S LATEST DEMAND OF THE DOCTOR

Oklahoma physicians pretty generally received notice in July that after that date, inclusion of the name of the doctor in what is termed the classified directory would be charged for at the rate of 25 cents per month per line, or \$3.00 annually. This notice seemed to voice the Telephone Company's opinion that the matter of such list was purely one of advertisement, therefore should be paid for by the beneficiary. The notice did not state that the company, holding a wide monopoly, with no rival to whom exasperated, poorly served physicians may apply in their desperation, had put the proposed increase in rates—for that is exactly what it amounts to—in force by authority of the Oklahoma State Corporation Commission which body only, in our State, may permit to publish or change schedules of charges, and we are under the impression that the entire process is to be put into execution by the whim and upon the plan of the telephone monopoly without consultation or leave of any authority, as we understand is required by terms of the Oklahoma law governing corporations. The notice also failed to mention any return compensatory improvement in service, for which there is notoriously abundant need. It did not mention that several increases granted it during the last few years, their failure to provide increased facilities or better service as a result of them, and it was silent on their late failure to secure a further increase in any section of the State within the last few months. The only suggestion was as above noted, and, to which we as a body or class emphatically demur for good and sufficient cause.

In Muskogee, the county society promptly called a special meeting to determine the course of action which the individual would be advised the majority had decided after due consideration. The meeting took the position that such listing was of no special benefit to the individual physician, but that if it was of any worth it was to patrons of the telephone in their time of emergency, that one seeking any particular physician would hardly seek the name in such directory, but in its proper alphabetically arranged position, and, finally, that such service was due from, if any one, the corporation, which has already fully demonstrated its ability to render atrocious service far out of proportion to the sum paid for it by a long suffering public.

The only phase which may possibly cause trouble over the matter, will be found in the isolated cases exhibited by a certain minority of our own ranks, who, simply to publish their ideas of liberty of action, and who fear that possibly some one may conclude they have a mind not functioning in its individual capacity, will obstinately take the diverse course believed to be best by the majority and insist in carrying their names in such column. The other class, of course, is that of the blatant advertiser, who, when he understands most physicians will not use such directory, will shiftily reason that possibly he may reap some sort of reward and do that the mountebank always does, follow the opposite course to that dictated by ethical considerations.

Every physician in Oklahoma should abstain from permitting his name to appear in this directory.

## CORRESPONDENCE

Dr. Earl D. McBride

Dr. Claude Thompson, Muskogee, Okla.

Dear Doctor:—When you asked me at our last meeting in McAlester if I would write a letter to the Journal describing the trip I was about to take to Europe, I promised readily, but now that my journey is about completed and I actually attempt to relate my experiences, I find it more of a task than I had anticipated. Descriptions of travel would interest very few and details of lessons learned in the Clinics, I fear, would be very boring, for my clinical investigations all pertained to the one subject, Orthopedic Surgery. However, should anyone be contemplating a journey abroad in the near future I might offer some very helpful suggestions based on personal experiences in getting from one country to the other, as life for the American traveler abroad these days is just "one—visa after another." Without going into detail, then, I shall confine myself to a few main points of general interest.

Landing at Glasgow, Scotland, the first stop was at Edinburgh where I had the honor to be one of the two delegates who represented the Oklahoma City Rotary Club at the great International Convention held for the first time out of America. I will say for the benefit of Fellow Rotarian Doctors that history was made in this great gathering of "good fellows". The royal greeting and cordial hospitality extended by the newly organized clubs of England, demonstrated that they had caught the Western spirit of idealism and the principle of "brotherhood in business" embodied in the well known motto of Rotary, "He who profits most serves best," was flung as a life line to struggling Europe.

This ancient city of Sir Walter Scott and Lord Byron, with its picturesque castle situated on the lofty crags in the heart of the city, and its quaint old historic spots, is never to be forgotten by the visitor. The University of Edinburgh, made famous in former years by such men as Lord Lister and Syme, still offers to the student of medicine all that can be desired in medical education. I found several American doctors there preparing to take the examination for the F. R. C. S. Sir Harold Stiles and Sir David Wallace, both well known in the Surgical world are to be found at the Royal Infirmary. John Frasier at the Royal Childrens Hospital, confines his surgery to children. Since there is no Chair of Orthopedic Surgery in the Uni-

versity, the subject is taught by these men in their courses in general surgery. It was explained that lack of funds and faculty politics had prevented the Chair from being established up to this time, but that an effort was being made to establish a professorship in this subject.

In London one can find excellent opportunity to do post graduate work in any line. The Fellowship of Medicine and the Post Graduate Medical Association is an organization founded by Sir William Osler in 1918, which includes most of the London hospitals and their attending medical and surgical staffs. Through the secretary, Miss Willis, one may arrange to enter any special course of the season, or a ticket admitting one to any clinic of the association may be obtained at the rate of \$25.00 per month. A certificate of attendance signed by the officers of the Association is given at the end of the period.

Some of the more notable medical schools hospitals open to the fellowship are: Guys, the famous old "borough" as it was known in the days of Sir Aspley Cooper and Henry Cline. St. Thomas, with its eight handsome spacious wings facing the banks of the Thames River, St. Georges on Hyde Park Corner, of John Hunter fame, and Kings College hospital established in 1913 and the most modern in equipment of all. In a very busy section of the city on Great Portland Street, is the Royal National Orthopedic Hospital, founded in 1838 by that great pioneer of Orthopedic surgery, William John Little. On the staff at this hospital may be found Mr. Elmslie, Mr. Bankhart and Mr. Treethowan, all progressive leaders of the profession. Mr. Fairbanks, also an Orthopedic surgeon may be found at Kings College Hospital, and Mr. Bristow at St. Thomas. At the latter hospital is also Mr. J. B. Menzel, who is an enthusiast upon early "gentle" massage in all fractures and has a most complete department for carrying out his procedures. It was disappointing to find that Sir Arbuthnot Lane had recently reached the age limit and retired from activity on the staff of Guy's Hospital.

The publicly supported hospitals are all in dire need of financial aid. One of the largest and finest, Kings College, has had to close one hundred and fifty of its three hundred and sixty beds. In fact this is true all over Europe. Very little modern equipment is to be found anywhere.

Leaving London a few days were spent in Antwerp and Brussels, and Paris reached in time to spend the 4th of July at Chateau Thierry and Belleau Wood with the Rotary delegation as guests of the French Government. The battlefields are gradually being reclaimed, and in some parts only the bright red new roofs of restored houses tell the history of what has happened. However, in locations, such as Ypres, Verdun and Rheims, where continuous fighting was carried on, conditions are much the same as on November 11, 1918. As one views miles of shattered trees and houses, he wonders how a human being could possibly have escaped alive. No American can ever appreciate what "going over the top" meant to the man in the trenches until he has seen with his own eyes these places of wanton destruction.

Medical Science in Paris is grouped about the University of Paris. There, as in London, is an organization for post graduate work. It is L'Association pour le développement des relations médicales (A. D. R. M.), a la Faculté de médecine de Paris. The secretary speaks English and is very accommodating in arranging courses and lists of special clinics for the visitor. No fee is charged by the Association but each surgeon who gives a course makes his own arrangements. English is spoken by many of the French surgeons, but it is very difficult to follow their courses of instruction unless one is able to speak and understand at least some French. Among the surgeons of Paris whose names are well known in America, especially since the War are M. Broca at L'Hospital Enfants-Malades, Tuffier at L'Hospital Cite du Midi, Duval at L'Hospital Lariboisiere, Gosset at L'Hospital Salpêtrière, and Mouchet at L'Hospital Saint Louis. The Orthopedic center of France however, is at Berk-Plage, a small seaside village near



Boulogne. It is claimed that the sea air there has a special merit in the treatment of "External Tuberculosis," and the government maintains a great Orthopedic institution there, known as L'Hospital Maritime. M. Sorrel is surgeon in charge. Several surgeons have private Orthopedic clinics at this place, the better known of whom are Jacques Clave and M. Calot.

French surgeons are somewhat critical regarding each others hobbies and methods but they have pleasing personalities and take a keen delight in receiving visitors into their clinics. I should like to describe some of the interesting features of a course given by M. Calot at Berk. but I fear the details would not be of interest.

Perhaps the most interesting part of my trip was a visit to Austria and Germany. Going via Switzerland the grandeur of the Alps is beyond description. But in contrast the journey on the poorly managed Austrian railway, with the hordes of human beings of all classes and breeds jabbering every language imaginable, dressed in various native costumes loaded with bags, bundles and children, all pushing, crowding and scrambling into the railway carriages, is an experience never to be forgotten. The U. S. Government is making no mistake in requiring all who come from these regions to remain in quarantine at Port of Embarkation for nine days and be thoroughly "decocted" before sailing.

Living in Vienna is, however, very pleasant for an American or for one who has money to pay for luxury. Before the War the Kronen was worth about twenty cents. Now it takes nine hundred Kronen to buy one dollar, which is about one hundred and eighty times below par. The Austrians have a custom of roughly estimating the increase in prices by multiplying the former price of par by one hundred. For this reason everything seems very cheap to the American, but is very dear to the native. A room with bath in the best hotel is about nine hundred Kronen per day. A good meal with beefsteak, bread, butter and sugar, which are considered luxuries, may be obtained for about three hundred to six hundred Kronen. Merchandise is very cheap providing it has been made in Austria. The best grade of Russian seal ladies' fur coats can be purchased for about one hundred dollars. Surgical instruments are so cheap that one is tempted to buy everything in sight. The best grade hemostat sells for fifty cents; six-inch scissors from fifty to seventy-five cents; thumb forceps for about twenty-five cents.

Austrians in general seem to have no prejudice against Americans except that they hold ex-president Woodrow Wilson responsible for what the application of his fourteen points did to their country. They insist that the division made by the allies was a great injustice to them, but at the same time express gratification for the aid America has given their poverty-stricken masses.

In only one clinic did I find suggestion of War prejudice and that was in the once famous clinic of Von Eiselsberg at Allgemeines Krankenhaus. Before being allowed to attend this clinic, if the visitor be from a country of the allies he is asked if he upholds the resolution passed by the last International Congress of Surgeons in Paris: i.e., "that no German or Austrian surgeon could belong to or take part in the discussions of the Congress."

There are quite a number of American doctors studying in Vienna at this time. Doctor A. P. Linger, 1st Assistant in Prof. Ortner's Clinic on Internal Medicine, is Correspondent for the A. M. A. and having spent several years in Boston before the War, speaks splendid English and is of great assistance to the visiting doctor.

In the clinics of Von Eiselsberg and Hockeneck, one may find every opportunity for studying fractures as most of the charity cases of fractures and injuries occurring in the city of Vienna are brought to these two clinics. The Orthopedic clinics of Vienna are those of the well known Adolph Lorenz at Allgemeines Krankenhaus and Prof. Hans Spitzzy at the Orthopädischen Spital. In the clinic of Prof. Lorenz, bloodless methods are still preferable,

while in Spitzzy's clinic open surgery is of first choice. Malnutrition cases are by far the most common of all in these clinics. The starvation of the people of Austria has not been exaggerated, nor is it yet at an end. Doctor Haas of Lorenz Clinic claims that the number of cases of rickets recorded during and since the War is about 200% more than during the pre-war period. He has described in a recent article a condition which he terms "Hunger Spine." The pathology, as he explains it, is a softening of the vertebral bodies, causing extreme tenderness on pressure and pain when walking. The long bones are not affected. There is no purpura and seldom the bleeding gums as in scurvy. Rest in bed with proper diet is the specific treatment.

One of the regrets of my trip was that previous arrangements prevented me from accepting a personal invitation from Prof. Adolf Stoffel to visit his clinic at Mannheim, Germany, and see him perform his nerve resection operation for spastic paralysis. I also had the misfortune when I visited Munich of not seeing Prof. Lange, the leading authority on Orthopedic Surgery in Germany.

However, I feel that it was a rare privilege to have been able to make the acquaintance of as many European surgeons as I did and hope to repeat the trip sometime.

Hoping I have not been too lengthy, in my remarks, I remain, Very truly yours, Earl D. McBride M. D. 208 Colcord Bldg. Oklahoma City.

## PERSONAL AND GENERAL

Dr. C. L. Rogers has moved from Knowles to Alva.

Dr. W. A. Thompson, Okmulgee, has moved to Dewar.

Dr. P. M. Hathaway, Marlow, was a victim of illness in July.

Dr. S. R. Bates, Wagoner, visited Arkansas resorts in August.

Dr. H. C. Rogers, Muskogee, visited Alabama points in August.

Dr. and Mrs. H. A. Conger, Duncan, are visiting Colorado points.

Dr. and Mrs. R. E. Waggoner, Pawnee, are motoring over Colorado.

Dr. C. K. Moore, Waynoka, has moved to Santa Fe, New Mexico.

Drs. Fenton M. and Winnie Sanger, Oklahoma City, accompanied by their son, made an automobile trip over Colorado in August.

Dr. and Mrs. W. H. Shipman, Bartlesville, are in Colorado for the summer.

Dr. O. E. Templin, Alva, reported very ill at a Wichita hospital, is convalescent.

Dr. E. Forrest Hayden, Tulsa, is at Augustana Hospital, Chicago, doing the Clinics.

Dr. T. K. Kelleam, Sallisaw has been appointed county physician for Sequoyah County.

Dr. S. W. Wilson, Lindsay, was very ill at the University Hospital, Oklahoma City, in July.

Dr. A. I. Briggs, Stillwater, has been appointed physician for the Magnolia Oil Company at Ingalls.

Sapulpa new Hospital may be named after Dr. J. Wade Bone, who recently died as Mayor of that City.

Dr. M. M. Roland, Oklahoma City, visited Bella Vista, Arkansas for the purpose of taking his summer outing.

Washington County Memorial Hospital, Bartlesville, had its cornerstone laid in the week of August 8 to 16th.



**Dr. and Mrs. W. W. Wells**, Oklahoma City, are motor-ing over Colorado. They are accompanied by Mrs. Wells parents.

**Dr. and Mrs. J. T. Phelps**, El Reno, announce the birth of a daughter, August 4th. She will answer to the name Mary Margaret.

**Dr. J. M. Thompson**, Tahlequah, left for California in August where he will spend several months visiting his family and incidentally indulging in his favorite, life-long vice—hunting.

**Dr. J. D. Waldrop**, Claremore, has been appointed health officer of Rogers County, succeeding Dr. J. F. Means, deceased.

"A Medical Taste" is the rather accurate description given water which was struck while drilling a well near Chandler recently.

**Dr. A. L. Stocks**, Muskogee, is doing dermatological work in Harvard Medical College, Boston. He will spend August in the work.

**Citizens of Clinton** presented the University Hospital, Oklahoma City with a wheel chair recently for the use of its disabled soldiers.

**Brooks Institute**, Hartshorne, a methodist hospital, it is said will be formally opened Oct. 9th. It is already being used as a hospital.

**Dr. S. N. Chattergee**, Muskogee, received painful, but not serious injuries when his car went into the ditch while driving south of Muskogee.

**Dr. W. E. Dicken** and family, Oklahoma City, are motor-ing over Colorado where they will spend the month of August fishing and camping.

**J. W. Scarbrough**, formerly of Gould is now in Chicago doing special work. After completion of his work he will seek a new location in Oklahoma.

**Slick**, Creek County, is now the possessor of a hospital, due to the executive and organizing ability of Dr. J. Clay Williams, who promoted the affair.

**Eastern Oklahoma Hospital**, Vinita, will have new buildings costing \$150,000 soon. The Manhattan Con-struction Co. Muskogee, receiving the award.

**Dr. Thos. Lane**, El Reno, was seriously injured when run down by an auto in that city July 13th. Dr. Lane sustained a broken arm and many lacerations.

"Boil Your Drinking Water" was the edict from Dr. Geo. Hunter, city physician, Oklahoma City. The advice re-sulted from an outbreak of typhoid in the capitol city.

**Drs. I. B. Oldham, J. H. White, Sessler Hoss, H. T. Ballantine and R. N. Holcombe** Muskogee, have announced the formation of a Clinic of which they will be managers.

**Dr. J. T. Frizzell**, Sulphur, who has been engaged in the banking business at that place has moved to his old location Clinton, and likewise resumed his "first love", medicine

**Drs. John E. Heatly, Walter Dersch, W. W. Wells**, their wives and several friends recently returned to nature via a days fishing trip near Calumet. No casualties are reported as to the fish.

**Dr. C. R. McDonald**, Jennings, and **Miss Audry Massey**, Oklahoma City, were married July 9th, immediately de-parting for a wedding tour to Colorado points. They are now at home at Jennings.

**Dr. C. W. Beason**, Claremore, narrowly escaped death when the car he was driving collided with two others going in opposite directions. Mrs. Beason received slight injuries, the car being demolished.

**Ottawa County Medical Society** held a meeting at Aft n July 8th. Papers on "Spastic Colitis", by Dr. E. A. Leisure and "Management and Treatment of Typhoid" by Dr. L. W. Trout, were read.

**Dr. R. L. Gee**, Hugo, asked which was Hugo's gre-test present need, named another connecting railroad, hydro-electric power and a sanitarium, but the "greatest of these is the sanitarium," said the doctor.

**Dr. Czar C. Johnson**, Secretary, Medical Officers of the 89th Division, Lincoln, Nebraska, announces that that organization will hold its 2nd. annual reunion at Kansas City, Mo., October 28, 1921.

**Dr. W. L. Kendall**, Enid, mourns the death of his wife, Mable Hicks, who died at the home of her parents, Newton, Kansas, August 19th, after an illness of two weeks. Mrs. Kendall was educated in the schools of Oklahoma Ter-ritory, afterwards becoming one of the States most ac-complished musicians. She was universally admired by a host of friends who were fortunate in knowing her, and who, with Dr. Kendall regret her untimely taking from life's stage of action.

**A School of Public Health**, made possible by bequest of \$1,785,000 from the Rockefeller Foundation, to Harvard Medical School, is now in its initiative stages, according to announcement by the officers of the Foundation. The excellent general course in tropical medicine, public health training, industrial hygiene already in operation at Har-vard will be added too immensely by this huge gift. The vard will be added too immensely by this huge gift. The present courses, public health administration, vital statis-tics, immunology, bacteriology, medical zoology and com-municable diseases. The school will be housed in adjacent building to the Medical School, Harvard maintaining its own school of Public Health, the two administration buildings being very closely situated to each other, and will maintain the closest possible relations.

**Oklahoma State Public Health Conference**, 4th annual session will convene in Oklahoma City, Huckins Hotel morning of October 11th and last through the day of the 12th. The tentative plan sofar announced by Mr. Jules Schevitz, General Secretary, provides for.

October 11th. Morning: Methods of tuberculosis con-trol. Afternoon: Oklahoma Public Health Problems. Evening Session, open to public: Care of tuberculous ex-service men.

October 12th. Public health education; Industrial health problems; with banquet for the evening session. The meeting will be conducted jointly by the Association and the State Health Department. Attendants will include representatives of health associations, National, State, County and Municipal, health committees, public health physicians, nurses, social workers and representatives of civic, commercial and womens clubs.

Among the speakers secured are: Dr. Chas. J. Hatfield, Managing Director, National Tuberculosis Association, John A. Lapp, Editor, Nation's Health, Chicago; Dr. A. R. Lewis, State Commissioner of Health; H. B. Fell, State Commander, American Legion, Ardmore. Annual transactions of the Oklahoma Public Health Association will be held the afternoon of the second day. Special luncheons will be provided for the various organizations, at one of which will be discussed the annual seal sale. The annual convention of the Oklahoma State Nurses Association is being arranged also for the time of the meet-ing, thus giving many of those intimately connected with public health nursing problems opportunity to attend the sessions.

**Dr. A. E. McFarling**, Marietta, visited a picnic near his home town recently, with disastrous consequences. He had barely left his car when on turning to look back discovered that it was a mass of flames.

**Dr. Z. J. Clark**, Cherokee, remained over after the Boston meeting to attend clinics in that city and New York. It is said that the fistie event at Jersey City also claimed some of the doctors time and attention.

**Dr. W. J. Trainor**, Tulsa, did not lose his third automobile by theft in three years, but nearly so. The thief got as far as Nowata with the doctors Buick roadster where the officers recovered the car, minus the thief.

**Drs. L. J. Moorman and Lea A. Riely**, attended the meeting of Eastern Oklahoma physicians at Tahlequah August 3rd. Dr. Moorman read a paper on "Tuberculoses" Dr. Riely read a paper on "Typhoid Perforation".

**Shattuck Hospital** will soon be an assured fact if plans of Drs Newman and Rollo materialize. Negotiations have been under way for some time, which when completed will place the work on footing looking to near completion.

**Dr. H. H. Bishop**, Dilworth, has moved to Danville, Ky. **Dr. Wann Langston**, Oklahoma City, recently suffered a tragic loss in the untimely death of Mrs. Langston. A host of Oklahoma friends extend sympathy to him in his day of despair.

**Dr. Shade D. Neeley**, Muskogee, announces the opening of the Muskogee X-ray and Radium Laboratory and offers the profession modern service in the use of the X-ray and Radium, the latter of which he possesses one of the largest collections of the State. His office is at 200 Equity Building.

**Dr. D. Long**, Duncan, formerly head of the bureau of tuberculosis, State Department of Health, upon abolishment of the bureau by the last "far seeing" legislature was appointed head of the Talihina Institution now under erection for the care of the tuberculous. Dr. Long will assume charge at once.

**Union Labor Hospital**, an Oklahoma City institution, according to press dispatches, has passed its first year successfully. The management claims to have received and treated 192 patients in the hospital of all classes. The affair is said to be a cooperative venture, the members each paying a small sum for certain benefits.

**Dr. Walter Hardy**, Ardmore is Oklahoma's first physician to employ an aeroplane for medical service to his patrons. He has been so impressed with his aerial experiences that he has placed an order for a plane for permanent use. We wish him success, but, Mr. Ford's tin lizzie still endears itself to us, price, danger and love for Terra Firma considered.

The **Medical Association of the Southwest** and the **Missouri Valley Medical Association** announce, through their respective secretaries Drs. F. H. Clark, Oklahoma City and Chas. Wood Fassett, Kansas City, a joint meeting of the two organizations October 25-28, inclusive. Headquarters at Hotel Baltimore, exhibits and all sections occupying the same floor.

**Dr. J. A. Copus**, Muskogee, Dentist has been held for trial on the charge of performing an illegal operation. The dentist, it is said, outdistanced Muskogee's local talent when it comes to making charge and collecting. His idea was that \$400.00 would pay for the services, now it is likely when the attorneys hand in their bill, he will conclude that the charge was too low.

**Dr. William Ray Ely**, Gibson City, Ill., is reported as missing and information as to his whereabouts is desired by Dayton and Bailey, Attorneys, 84 Williams St., New York. He is a graduate of P. and S. Chicago, 1909. Born in Mazon, Ill., 42 years old, 5ft 9 inches high, (dark complexion, brown hair and eyes), last heard from in Chicago, October 1920. A wife and four children have heard nothing from him since that time.

**Dr. C. H. McBurney**, Clinton, joined the ranks of automobile losers, but fortunately for a short time only. While the doctor was at church an ex-reform school inmate took possession, surgical kit and all. The Sheriff and Dr. McBurney overhauled the young man in a few hours, sleeping by the roadside. He claimed the car was his fathers, when asked why the instruments, that his father was a doctor. He is now reflecting on the matter in Arapaho jail.

**Oklahoma's 4th Annual Public Health Conference** will be held, according to announcement of the General Secretary, Mr. Jules Schevitz, at the Lee Huckins Hotel, Oklahoma City, October 11-12, 1921. The meeting will be conducted under the joint auspices of the Oklahoma Public Health Association and the State Department of Health. Immediately following the conference the Oklahoma State Public Health Nurses Association will hold their annual meeting.

**All Saint's Hospital**, Mc Alester, is planning improvements to cost \$50,000.00 according to press dispatches. The 40 bed capacity of the hospital will be more than doubled and the obsolete furnishings will be replaced according to modern demands. The institution which had its inception due to a frightful mine explosion years ago, has been full nearly all the time since its erection then. It is planned that in addition to the above, \$30,000.00 available later will also be added to the plant.

**Dr. and Mrs. Fred S. Clinton**, Tulas, now touring California, are at the Hotel Virginia, Long Beach. They will return in September. The *Long Beach Telegram* recently contained an extended interview given by Dr. Clinton which mainly dealt with Oklahoma's resources. This one in particular goes a long ways toward "putting people right" as far as can be, in their understanding of the Tulsa race riots. Perhaps no man other than a physician has the first hand knowledge and many intimate experiences connected with such episodes, so he is found, as usual "boosting" the old home town.

The **Midwestern Association of Anesthetists**, according to announcement of Dr. Morris H. Clark, Secretary, Kansas City, Mo., will hold an organization meeting October 24-28, in Kansas City. A program of unusual interest to anesthetists is being arranged. Headquarters will be at Hotel Muehlbach and all scientific and social sessions will be held there. Membership, open to all qualified members of the medical and dental professions as well as to research workers and those interested in the subject of anesthesia. Annual dues, \$5.00, should be remitted to the secretary at once.

**McIntosh County Medical Society**, held an unusual meeting August 16th at Checotah, Dr. W. A. Tolleson, Secretary, reports the program as being made up by papers from Drs. Will Patton Fite, J. H. White, Muskogee. An interesting presentation entitled "McIntosh County Mountain Dew", was discussed by Drs. McCulloch, Checotah, J. H. White, Muskogee and J. N. Shaunty, Eufaula. The final decision on the merits of the offering is not reported. The affair was enlivened by a picnic dinner and a plunge in Checotah's Ole Swimmin Hole. The dinner was served by Mrs. J. N. Lee and J. C. Watkins.

**August Journal Delay.** This issue of the Journal is further behind in its appearance than any issue has ever been, with one exception, that of June 1909. This delay is unavoidable so far as our office is concerned, and was forecast several months ago as one of the incidents of the Typographical strike. This caused a wide change in employees having to do with the mechanical make-up, necessarily followed by slower work due to unfamiliarity, then on top of that some of those heretofore taking many personal pains to assist in issuance had the misfortune to have illness in their families which took them away from Muskogee and the Journal, so we have the delay as a result. It is hoped we shall not have this experience again.



**Kansas City Physicians** are arranging for a special clinic week to be held during the meeting of the several medical organizations scheduled for the dates October 25 to 28 inclusive. In the work the active co-operation of the Medical Veterans of the World War, The Jackson County Medical Society and other medical organizations is assured to make of the week one of the greatest yet tendered the medical profession by the Kansas City profession.

**Dr. Fred S. Clinton and the Oklahoma Hospital, Tulsa,** after rendering services of every conceivable nature to wounded policemen incident to the Tulsa riots, caring for one policeman 118 days, finally had to go to court and sue the City in order to receive their dues. Legal sharks, inactive, impotent, unheard of during the trouble, soon forgot the hours and days of hard work and showed up at the Commissioners meetings "protesting against the outrage" the "outrage" consisted in demanding remuneration for hard work and food supplied the worthies in question, which reminds us "The Devil a Saint Would Be".

**The Oklahoma Medico-Piscatorial Association,** is the name given a new, organized between trains, medico-sporting association, which held its initial meeting at Sycamore Inn, Tahlequah, August 3rd. Drs. W. G. Blake, Tahlequah and Jos. A. Patton, Stilwell, were respectively temporary chairman and secretary. Ex-Congressman Hastings made the address of welcome, citing much of the history of the Cherokee and his habitat, the beautiful hills and valleys of Northeastern Oklahoma. Papers were read as follows:

"Tuberculosis" by Dr. L. J. Moorman, "Typhoid Perforation", Lea A. Riely, Oklahoma City; "Surgery of the Genito-Urinary Tract" J. H. White, "Radium and X-ray Therapy" Shade D. Neeley, "Local Anesthesia" Will Patton Fite, Muskogee.

**Dr. Claude Thompson,** Muskogee, did not read his touching little poem horn of personal experience, "Who's Swiping My Patient Now", on account of lateness of the hour. The organization will become a permanent feature of the midsummer months, and Tahlequah will always be host to the gathering. The intention of the promoters is to mix science and recreation in compatible proportions. Probably hereafter the meetings will be arranged to cover more than one day in order to give physicians attending opportunity to take a real rest in one of the State's delightful spots.

"**Publicity Is Not Ethical**" said Dr. C. H. Ball, Councillor, in an address before the Tulsa City Advertising Club. There was a "difference of opinion" from some other medical gentlemen present, said the report, which difference was augmented by the argument of one J. Burr Gihbons "former newspaper man". The latter asserting "certain types of cases are interesting to the public etc." that the name of the physician should be annexed to the report. The question probably will never be settled, but it is a fact that those of us often called upon to make statements to the press know by sad experience the utter impossibility of getting correct quotation unless exact reproduction of our written matter is insisted upon. The most incongruous messes and impossible results come out of the episode if any other plan is attempted. Close observers of matters medical appreciate the very close lines and strict limitations to be exactly followed and stated if the whole thing is made anything except a danger to the careless reader or a joke to the informed. Therein lies the danger of hurried report of any physicians alleged statements, that wrongful reproduction is surrounded by dangerous possibilities, is too well known for notice. That elimination of what the editorial writer considers superfluous lines or extraneous matter may hutch the entire piece is also well known, so we hold with Dr. Ball that mostly such notices are not only unethical, but they are dangerous and misrepresentative as well. Carefully written, simply worded, boiled down articles on medical matters perhaps are or may be useful to the reading public, but they must be so carefully prepared if they are to be worth anything that

hurried reproduction by the average reporter is out of the question if the doctor is not to find himself blushing on reading his alleged "remark".

#### LIFE'S TWELVE AVOIDABLE MISTAKES

To attempt to set up our own standard of right and wrong, and expect everyone to conform to it.

To try to measure the pleasures of others by our own.

To expect uniformity of opinion.

To look for judgment and experience in youth.

To try to mold all dispositions alike.

Not to yield in unimportant matters.

To imagine that one's own actions constitute perfection.

To worry ourselves and others about what cannot be remedied.

Not to make allowance for the weaknesses of others.

To live as if the moment and the day are so important that they will last forever.

To consider anything impossible that we ourselves cannot perform.

—*Medical Review of Reviews Feb. 21*

#### HELIO THERAPY IN SECONDARY SYPHILIS

"Secondary Syphilis usually runs a mild course in the tropics, commonly attributed to skin activity, though we believe sunshine has much to do with it. Now comes Rasch, who exploits heliotherapy as a rational resource in the treatment of secondary eruptions and he cites a most remarkable case of success therein (Ugeskrift for Laeger, November 25, 1920). But Rasch is in error in the contention that the method has not been tried, for A. Rollier, in his work, "La Cure de Soliel", on page 190 of the 1914 edition issued in France, recommends sun exposure in the treatment of certain syphilitic lesions, even gummatae, but stresses the need for mercury in connection therewith. Certainly the method is worthy of trial.—T. S. B. (The American Physician, May, 1921).

Certainly worthy of trial, as are all the effective procedures at one's hands found to be effective. It has long been our idea that there was no royal road to the proper treatment of syphilis, its myriad manifestations should be met with common sense, with the idiosyncrasies of the patient before us, we should intensively use every well tried, effective, result producing means offered by experience and logic. There is no more tragic result in the annals of materia medica than that sure to be seen in those cases in which the physician relies upon one, and one alone, of the many measures eradivative of syphilis. *Thompson*

#### THE SURGEON AND HIS HIRE.

(From the New York Times.)

Johns Hopkins hospital may expect one speedy result from its new ruling—that its doors will be besieged by the ultra rich in need of an operation. Truth to say, surgeon's charges in their upper range have long been highly questionable. They have been scaled, not primarily to the importance of the operation or the skill of the operator, but the means of the patient. One surgery of national renown employs agents to make a thorough investigation as to the patient's annual income and then writes out a bill for a twelfth of it—not infrequently a matter of very many thousands of dollars. Some local practitioners are almost as steep in their charges. When it happens, as it sometimes will, that the patient dies, the bill presents a perplexing problem to his executors—which is often carried to the courts. Dean Williams was not without justification when he said that the love of money was not greatest danger confronting the medical profession and had already seriously lowered its standing before the public.

All this, however, presents only one side of the picture—perhaps the less important side. As a rule, those surgeons who exact the highest fees from the rich have made a lifelong practice of giving one-half to two-thirds of their time to the poor—without any compensation beyond an increase of experience and reputation, together with the satisfaction of rendering a truly noble public service. The surgical institute that charges those who can afford it a month's income treats multitudes of the needy gratuitously



and with precisely the same care. Thus the surgical profession constitutes a sort of benevolent feudalism. Like Robin Hood, it relieves the rich of superfluous pelf and distributes it among the poor. The profiteer against whom Dean Williams rages is all too real potent; but he is more prominent in the public prints than in actual experience. By and large, surgeons—and physicians also—are perhaps the most benevolent and public spirited of professional men. The ruling of the Johns Hopkins hospital strikes at a real abuse; but if it is generally adopted, as is not impossible, it seems likely to lower the standard of public beneficence in the profession as a whole. The surgeon is entitled to his livelihood, and if one source is dried up he is more than likely to tap another.

The very poor will probably not suffer; for the honor of society their needs must be met. The difference will appear in the case of the moderately well to do. Hitherto very few of these have been called upon to pay the Johns Hopkins maximum of \$1,000 for a major operation and \$35 a week for subsequent attendance. Many have paid only from one to three or four hundred dollars for the operation and a nominal fee for attendance. If surgeons are very generally cut off from the larger fees, the result will inevitably be an increase in their ordinary charges. The purpose at Johns Hopkins was doubtless to safeguard the reputation of the surgical profession; but the logical result of the new rule is one more to benefit the rich at the expense of the moderately well to do.

#### DOCTOR CHARLES B. BRADFORD

Dr. C. B. Bradford, Oklahoam City, retired, for many years a leader of our profession, President of Oklahoma Territory Medical Association, 1899, one of the charter members and a member of the original board applying for and receiving the charter of our Association, is dead.

Dr. Bradford was born at Fillmore, Mo., October 3, 1855, educated in the Council Grove (Kansas) High schools, graduate of the Kansas City Medical College, (Missouri) March 7, 1882, after which he practiced for fifteen years at Council Grove, when he located in Oklahoma City, where he has taken an active, positive and emphatic part in every movement professional or civic which concerned his city and state. Dr. Bradford was especially interested in educational matters and in the advancement of the scholastic systems of Oklahoma, occupied many positions as officer of school boards and director of activities allied with educational matters.

He is survived by a wife, a daughter, Mrs Jennie M. and sons, J. W. Bradford, Oklahoma City and Dr. Walter C. Bradford, Shawnee. Interment was made at Fairlawn Cemetery, Oklahoma City, under direction of St. Luke's Methodist Church.

The following resolutions were adopted by Potawatomie County Medical Society, on Dr. Bradford's death.

WHEREAS, the Grim Reaper has removed from us Dr. C. B. Bradford, who for many years practiced his profession in this and other communities, and

WHEREAS, the deceased was not only a well known physician but a progressive and useful citizen.

Be it resolved by the members of the Potawatomie County Medical Society that we have lost a friend who has always given his friendship and kindly advice to us, his fellow practitioners, and

That we extend to his family, in their great bereavement, our heart felt sympathy, and

That this resolution be made a part of the minutes of this society, and that a copy be sent to his family, and to the Journal of the Oklahoma State Medical Association for publication

Committee: H. M. Reeder, chairman, J. M. Byrum, T. C. Sander, Secy.

#### DOCTOR ANDREW JACKSON BREWER

Dr. A. J. Brewer, Coweta, for many years located at that point and in Muskogee, died July 14th, after an illness of three weeks. Dr. Brewer was born at Benton, Tenn. January 23 1850. Attending the common schools as they existed at that day, he afterward graduated from the University of Louisville, February 27, 1889, upon which he located at Newport, Ark., where he remained for 12 years, when he moved to Oklahoma practicing at Muskogee and Coweta.

Dr. Brewer leaves a wife, one daughter and two sons. Burial was made at Coweta under the auspices of the Masonic Fraternity of which he was an enthusiastic member always taking great interest in their work. He was distinctly of the "old school", fearless in his appraisal of things. Conservative in his acceptance of the "new fangled" ideas, a worshiper of the old ideas of the South, to which he clung with unusual reverence throughout his life

#### DOCTOR PLEASANT MOSELY HARRAWAY

Dr. P. M. Harraway, Marlow, died in that city July 28th, from an attack of cerebral hemorrhage, superinduced by prolonged illness from heart disease. Burial was held from the Presbyterian Church, under Masonic auspices, interment made at the City Cemetery, Marlow.

Dr. Harraway was born near Rogersville, Alabama, July 1, 1861, graduating from the Memphis Hospital College, practicing at Rogersville, then in Texas, where he was married to Miss Anne Tarrant, December 24, 1898. Four children resulted from the union three of whom are living, Mrs. Harraway dying in 1906. After living in Hastings a year he located in Marlow sixteen years ago, he has established a wide circle of friends and lived a useful life. He was a member of several fraternal organizations, his county state and the American Medical Associations.

#### DOCTOR J. WADE BONE

Dr. J. W. Bone, Sapulpa, for many years Mayor of that City and who died while rendering that service to his city, July 27, 1921 from apoplexy was born at Buffalo, Mo., April 14 1867, receiving his education in the common schools, later graduating at Barnes Medical College, St. Louis 1886. He practiced at Grove Springs, Mo. after which he moved to Indian Territory, locating at Chelsea, where after practicing for nearly ten years he moved to Sapulpa to make that his final place of effort and activity. Dr. Bone was blessed by a friendly personality which made him many friends who saw those good qualities he possessed as greater than his little faults. He is survived by a wife, Mary A. Bone, no children ever resulting from the union. Three brothers and a sister, all residing in Missouri. Dr. Bone was a member of the County, State and National Medical bodies and of the Sapulpa City Society; affiliating with the Masonic, Odd Fellows and Elks. His remains were interred at the Sapulpa Cemetery July 29, 1921.

#### DOCTOR JAMES FOSTER MEANS

Dr. J. F. Means, Claremore, died in that city July 12, after an illness of four days. Heart trouble being the cause of the death. Dr. Means was stricken while attending a meeting of the American Legion of which he was an active member.

Dr. Means was born at Frohsburg, Pa., February 12, 1866, graduating in medicine at the Baltimore Medical College in 1892. He led an unusually adventurous career during his youth, visiting France and other countries as cabin boy on vessels, joining the army and participating in the capture of Geronimo

Coming to Indian Territory in 1893, he made the run at the opening of the Cherokee Strip. Practicing in West Virginia for several years, finally locating at Claremore in 1907. In 1901 he was delegate to the British Congress on Tuberculosis, Queens Hall, London, as a representative of the United States, remaining abroad for several months he made special studies at eye, ear, nose and throat clinics. Very early after we entered the World War he applied for and received a commission in the Medical Department, and it was during that service he contracted the infection which ultimately resulted in his death. He held various positions of trust and responsibility during his professional career, Health Officer of Rogers County as well as President of his society. He at all times retained an active interest in military affairs and held various commissions as reserve officer after the war and at time of his death.

His funeral is said to have been one of the most impressive ever held in Claremore, an unusually large body from every walk of life attending the services to render homage and respect to the departed friend and citizen. Burial was made at Woodlawn Cemetery, at which addresses were made by Harry Cates, Commander of the American Legion; Reverends Clarence Campbell, Chaplain of the Post; H. M. Gardner, Louisville, Mo. and E. C. Murray of the Tulsa Post, the final tribute being taps and a salute fired by details from Collinsville and Chelsea Posts.

Words relating to the life and passing of Dr. James Foster Means by the following committee appointed at a meeting of the Rogers County Medical Society held in Claremore on the 3rd of August, 1921.

Dr. James Foster Means, for all this life has gone on from us. He has passed from this stage of action to that undiscovered country. Those who knew him best loved him most, and trusted him most completely.

To all who came to him in a kindly manner, he gave with a cheerful unselfishness, in the truest Christian spirit, his best.

Without the mark of ostentation or self laudation, he met all demands with a zest, that might incline us all, to feel that he deserves the best to come.

He was the proud possessor of that rare grace, the virtue of the lips. He did not animadvert the good name of others. And this is a beautiful and a fitting flower to place upon his grave, and link to his memory.

For all honorable physicians he had only pleasant words.

He was always moved at the sight of exquisite shadows and shadings of grace flowers and foliage as they chanced to be assembled about the common walks of life; and love to dwell upon the weavings and pencillings of the grand Artist of the universe. To him God was ever a presentee and of all things most real.

He held for all animals and fowls a sympathetic devotion, that should become a lesson to all of us.

What ever may be said of our departed friend and brother, there are none, who can lay to him the accusation of hypocrisy.

He was not only a faithful friend, he was a deeply interested father, full of hope and trust.

We have never met his friendly face, that we did not in it to recognize his manly spirit and genial greetings.

We know that in his heart's cell, shut up forever, that he had griefs and sorrows. These may have distressed, but of them he never spoke. They seem to have ripened within his heart and attitude of soul, that was very beautiful. His truth, fervor and devotedness, finding no worthy alter, have been forced

to return to him to die of their fullness.

It is often in the average human life, that it requires the acid of some deep sorrow, with which to cleanse the windows of our souls, that pity and due consideration, for others, may shine through. If the noble and the good in us, can never die, then too, Dr. James Foster Means, shall find a grand balance in the abiding Bank of God's eternal joy.

J. G. Waldrop, W. F. Hays, H. H. Earley, Committee.

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## OKLAHOMA STATE MEDICAL ASSOCIATION

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### A PLEA FOR A MORE THOROUGH EXAMINATION IN DISEASES OF THE CHEST

By J. W. NIEWEG  
DUNCAN, OKLA.

In the way of a preface, I want to say, that, "A Plea for a Physical Examination in Diseases of the Chest," might have been a more appropriate subject to have discussed in this paper. For often no examination is made at all. I have seen physicians make a diagnosis of pneumonia without ever making a physical examination of the chest at all. Not because they were not able to detect the physical signs of pneumonia, but because they were hurrying along expecting to collect the same fee for a casual examination, that they would for a careful examination.

We are living in a commercial age. We are dollar chasers and are trying to catch them by the shortest route, regardless of the good or harm we may do our patients. I want to appeal to you to call a halt on the commercialization of the practice of medicine. Let us heed the admonition of the Fathers of Medicine—Galen and Hippocrates. "I will follow that system of regimen which according to my ability and judgment I consider for the benefit of my patients, and abstain from what is deleterious and mischievous. With purity and holiness I will pass my life and practice my art." Do we always use our ability and better judgment? We denounce the Chiropractors for attempting to heal human ills, because he is wholly ignorant of anatomy and physiology. Yet, with all of our knowledge of anatomy, physiology, chemistry, pathology and all the basic subjects we do not avail ourselves of this knowledge. We ask our patients a few questions and proceed to write them a prescription.

Neither percussion nor auscultation requires the possession of the technical knowledge of acoustics nor a cultivated musical ear to detect abnormalities of the chest, though it is beneficial, especially in making the finer diagnosis. With a little practice and keeping our minds thoroughly fixed on the normal sounds, one

can realize abnormal sounds, even as to character, intensity and pitch. The woodman without any training at all goes about the forests and taps the trees with his ax to ascertain if they are solid or hollow. The carpenter taps the plastered wall with his hammer to find a studding in which to drive a nail. If percussion is so servicable to the laborer and the mechanic, why should we neglect it? No elaborate instruments are required. For percussion, the fingers of the left hand make a good pleximeter and those of the right hand a plexor.

There are some things, however, we must keep in mind in percussing the chest. In comparing sides or outlining effected areas percussion should be performed at the same stage of respiration, using the same force with each stroke. It should not be done on the one side over a rib and on the other over an interspace. I once saw this mistake made in an Army Camp by a man who was very familiar with the physical signs in diseases of the chest and was thorough. He had been a teacher of physical diagnosis in civil practice. This was not due to unfamiliarity with the physical signs of the chest, but was due to gross negligence of the examiner in hurriedly going over the chest. Changes of position may change the percussion note, as changing from the recumbent to the erect position will raise the pitch. We must keep in mind the areas of dulness caused by the heart, liver, spleen and muscular masses of the scapulae. Also the areas of normal pulmonary resonance and tympany.

In auscultating the chest there are certain adventitious sounds not produced by pathological conditions, that we must keep in mind, so as not to confuse them with sounds produced by pathological conditions. Some of which I will briefly mention: First, however, permit me to say, we must be sure that the connections of our stethoscope are securely fitted so as not to cause a friction by the different parts. Having attended to this, we must exclude all outside noises, such as the stethoscope rubbing on the skin, fingers rubbing on the stethoscope, breathing against the stethoscope or the crackling caused by auscultating over hairy



surfaces, which can be readily overcome by moistening the surface with water or oil. Oil is the better of the two. In auscultating over large muscles, in particular the pectorals and tropezii, a fine crackling sound may be heard sounding not unlike crepitant rales. When the stethoscope touches the edge of a bone, especially the sternum, a fine crackling may be heard that is not easy to distinguish from crepitant rales. Some of the other sounds that may be mistaken for crepitant rales are, aclectatic rales heard at the apices; marginal sounds, heard on deep inspiration, most marked in the right axilla and lingual sounds heard at the apex of the heart. We must distinguish between a pleural rub and a pericardial rub.

In auscultating heart murmurs we must distinguish the time in the cardiac cycle in which the murmur is heard. If it is systolic, pre-systolic, a late systolic or diastolic and if it is transmissible, if so, in what direction and the anatomical location or point of maximum intensity.

I once saw, in an Army Camp, a case of respiratory arrhythmia mistaken for pulsus alternans of aortic insufficiency. This is another instance in which a serious error was about to be committed, due to a hurried and careless examination. Had this soldier not been picked up later, accidentally, he would have been discharged from military service, thus the government losing a good soldier.

I want to report another case to illustrate the great danger and inconvenience we may inflict upon our patients by a careless examination, or no examination at all, as was the case with this patient. On Dec. 10, 1919 I was called to see Mrs. S. I received the following information from her father, at whose home I was called to see her; he stated that her home was in the Northern part of this state and that she was suffering with tuberculosis, her home physician had advised her to go to the high altitudes of New Mexico. Her husband had disposed of his crop at a sacrifice and carried out the advice of his physician. On arriving at their destination she did not improve as they had anticipated, but instead there was a deterioration of her condition and she continually became worse. After a short time her feet and lower limbs began swelling, her cough became more distressing, increased cyanosis and dyspnea. After two months on the high altitude her husband decided to bring her to the home of her father to die, which she did a few weeks after I saw her. She was 39 years old, the mother of five children, all healthy. Following the birth of the last child, some four years ago, she had a slight puerperal infection, otherwise, she had always enjoyed good health until about two years ago. She then began having frequent attacks of coughing, lasting a

week or more. They were accompanied with blood-streaked sputum and later haemoptysis. She had dyspnoea on exertion. At the time of my visit she was very much emaciated, cyanotic and had edema of both lower limbs. A physical examination revealed that she was suffering with mitral insufficiency with loss of compensation. The cough was due to accompanying bronchitis. On inquiry, I learned of her, that her physician had never made a physical examination. In all probability, he based his diagnosis on symptoms manifested—emaciation, cough, blood-streaked sputum and haemoptysis.

My plea to the profession is, let us give our patients the very best that is in us, and exercise more thoroughness in our examinations, especially, in diseases of the chest.

### Discussion

*Dr. D. D. Paulus, Oklahoma City:* I merely wish to relate a brief history of two cases we had in our clinic to emphasize the importance of a good history in chest cases, also how a thorough fluoroscopic examination may reveal findings when other physical findings are negative.

First patient comes in complaining of severe pains under sternum. This seems to involve entire substernal area, aggravated on movement only—getting up or lying down is especially painful. Only has an attack about once a year. This lasts a few days with temperature up to 101 and disappears on rest in bed. Physical findings on repeated examination negative. X-ray examinations repeated three times at intervals of one year all negative.

Patient is a young man, who had septicemia seven years ago following tonsillectomy. Short chained streptococci cultured from blood at that time. Had double pleurisy with effusion with marked myocarditis at that time, 150 c.c. straw colored fluid from each side at that time. Now has attacks described above—every six months to a year. What is the diagnosis in this case—Chronic Mediastitis probably. Without the history, the findings in this case might be quite misleading.

The second case is a young man—mail carrier by occupation. Comes in complaining of pain under left rib margin, especially on deep breathing. Condition has existed for five years. Has seen a great many physicians to find out causes of this pain—without results. Gives a history of lung trouble on left side five years ago. Physical examination entirely negative. X-ray plate of chest negative. Fluoroscopic examination shows tent like projection about 1½ inches long on left diaphragm—on deep breathing. Diagnosed Diaphragmatic Pleuritic Adhesions.

In children especially a lateral exposure of chest in X-ray examination may reveal findings in region of left hilus which might otherwise be obscured by heart shadow in a straight posterior anterior exposure.

*Dr. Niesveg*, closing: I want to thank the gentlemen for discussing the paper and bringing out points that I did not mention. It was not meant to deal with the methods of diagnosis so much, but the main object was a plea for a more careful and more thorough examination. I probably dwelt on percussion and auscultation more than I should have, considering the title of the paper, but I feel that is the part of the chest examination that is most frequently neglected. My plea is, give the patients the very best that is in you, for every time we examine a patient, a life may be at stake.

### THE PROBLEMS OF HEART TROUBLES FROM THE STANDPOINT OF THE GENERAL PRACTITIONER

By J. H. SCOTT M. D.  
SHAWNEE, OKLA.

The discussion of heart conditions is as old as the medical profession. I shall not attempt to give historical data, although that would be interesting and instructive.

During all the early period of medicine and largely up to the present time, heart diseases were interpreted by the organic or structural lesions, which were determined by palpation auscultation, percussion and instrumental findings by the electrocardiogram and other instruments of precision. This plan of study has been perfected by Lewis and Price of England until it is truly remarkable how accurately the kind and extent of structural damage can be outlined and determined.

But after all this brilliant and expensive work has been done, the individual patient is not very materially benefited except that we are able to make a somewhat more accurate prognosis and to say which case will be improved by the use of digitalis.

During the progress of time and study, the facts that cardiac function is important; that the myocardium develops vital changes and that blood pressure changes at times develop, has been definitely demonstrated. All of this has an important bearing on the diagnosis, prognosis, treatment and management of cardiac disease. So taking up the treatment and management of cardiac disease Sir James McKenzie has taken the position that it is immaterial just what structural lesion exists but that the ability to functionate is the important consideration and he has so planned the study that we can estimate somewhat the degree of disability and thus be able to manage

a case in a way to ward off heart failure for the greatest length of time.

McKenzie reasons that the question of heart failure is the vital question. That we are either dealing with heart failure in some degree or the probable development of heart failure and that our problem is to control and correct an existing heart failure and manage a case so as to prevent the development of prospective heart failure. It matters not if we have a murmur, an arrhythmia or a high blood pressure if the integrity of the myocardium is sufficient to keep up function.

In 1916 A. R. Edwards, a Chicago author, used this language, "Although convention has sanctioned the classification of heart diseases into those of the myocardium endocardium and pericardium, besides its nervous disturbances, nearly all cardiac disorders are referable—on last analysis—to failure of the heart muscles."

This was then and is now in line with all American authority and is the accepted theory by all American physicians. Working upon this universally accepted theory, McKenzie has dealt with this disability from the phase of heart force. He classifies the forces of the heart as "rest force" and "reserve force."

These forces are estimated by breathlessness. If a patient can breathe easy and be comfortable while at absolute rest in bed then the rest heart force is intact. But if there is breathlessness notwithstanding the fact that the patient is at absolute rest, then the rest force is impaired and the impairment is measured by the degree of breathlessness.

The rest force is that heart force which maintains the circulation during effort and the rest force is measured by the extent of effort that can be used without developing breathlessness. The perfectly healthy heart has a rest force that is limited. Thus the effort made by the athlete or cross-country runner develops a breathlessness which means that the limit of endurance of the rest force has been reached. So with the weaker and diseased heart, the limit of endurance of the rest force has been reached when the effort develops a breathlessness.

The heart forces exist and are maintained in proportion to the integrity and strength of the heart muscle and the extent of the heart load which is represented by organic defect, mechanical obstruction to the flow of the blood stream and effort.

The treatment of the weak heart is practically all now absolute rest, some modification of the diet, some form of digitalis in most cases and occasionally some other heart stimulant.

All of this represents faithful pains taking labour, well worked-out theory and much relief

to human distress, but while this is true the great army of heart and circulatory cases go marching on gathering number and momentum as it goes farther into the field of civilization and the unknown future development of health conditions. The study of statistical facts shown by the record of many years by a number of large life insurance companies is of much interest in this connection. They show that while the general average of longevity has increased and that the average length of life of the policy holder has increased, yet it also shows that deaths that come from the cardio-renal and vascular diseases viz: Endocarditis, Myocarditis, Pericarditis, Aneurysm, Valvular defects, Arteriosclerosis, Angina Pectoris, Apoplexy, Albuminuria and a few other kindred conditions, has a high percentage of increase.

Until the investigators arm and equip us to make a formidable attack at the ethiological base of heart disease, the army of heart and circulatory cases will continue to increase in number. In introducing his latest work on Diseases of the Heart, Sir James McKenzie says, "We are still so ignorant of the factors underlying the causation of heart disease that it is impossible for a writer to describe the subject of this article in that simple and comprehensive manner which a full and complete knowledge of the subject would permit. A lack of knowledge of the cause of phenomena in nature compels a description of the manifestations as if they were distinct entities. This leads to a great accumulation of detail and renders a subject like disease of the heart confused and difficult of comprehension.

"The origin and insidious progress of heart diseases are, in the majority of cases, hidden from us and we are only brought face to face with heart disease after it has gone beyond the hope of cure, let alone prevention. The circumstances that bring a heart to light is generally some experience of the patient, some sensation of distress which compels him to seek the doctor's advice. When the doctor examines the patient he often finds the mischief already done and all he can do is to guide the patient's future life in paths that will conserve the heart's strength.

"The question in every case that confronts the doctor is 'Is the heart failing?' or 'Do these signs indicate the presence of heart failure?' or 'Do they foreshadow its occurrence?' The question of heart failure is therefore of first importance."

My investigation leads me to conclude that the great majority of workers and authors in the field are doing much with the phases of symptomatology, prognosis and treatment, but have thrown up their hands in the face of the great problems of etiology and prevention.

The scope of the probable etiology of heart disease in its present status is wide and comprehensive and so far as I know there is no text that takes up in a comprehensive and systematic way the etiological study and gives a plan for prevention of heart diseases. I do not expect to do more than to stimulate discussion and some degree of observation and investigation by you in the general field of practice. It is you who are first in contact with the cases of definite heart disease. It is you who are in position to follow back into the life history of each case, to work out a possible starting point for your case. When we study the etiology as given by authors who write of the various forms of heart and vascular diseases as separate conditions, we are unable to find a single condition described as a primary heart or vascular pathology. All through the long line of heart pathology each condition is given a secondary state. I therefore take the position that there is no primary heart and vascular pathology. The cardiac nerves, the myocardium, the endocardium and pericardium are each involved in a secondary way by certain definite things. I think it would be far better if our cardiac specialists would point us back to the basic etiology and direct us along the lines of prevention for I hold that it is better to prevent heart pathology than it is to be able to treat it after it has developed.

When we review the field and compile the information we find that there are many things that are already proven facts. Thus we find that infections, acute and chronic, general poisoning, drug poisoning and strenuous effort mental or physical, practically form the basis of all cardiac pathology.

The thought that should be uppermost in our mind concerning the heart in all of our work is prevention. Knowing that the acute infectious conditions, scarlet fever, tonsillitis, diphtheria, typhoid fever, and other acute conditions are likely to leave heart pathology these cases should be followed up and kept under observation until all infection is proven to be cleared up. Knowing that infected teeth tonsils, gall-bladder and other foci of chronic infection may make heart pathology, we should not let any patient pass through our hands without looking for the presence of one or more of these conditions. Knowing that syphilis is responsible for much heart disease we should try to know that no case of syphilis gets by us without proper curative treatment, and knowing that food poisoning through improper eating and poor digestion, that drug poisoning through exposure to and by the use of them as phosphorus, lead, alcohol and tobacco, and that long continued strenuous effort, that long continued worry and long continued hard physical work, each and all help make heart and



vascular pathology, we should try to control direct and manage patients along these lines. Let us study a few statistical percentages. Seventy per cent of all malignant endocarditis develops on a benign lesion already existing. Eighty-five per cent of all acute benign endocarditis is preceded by or associated with rheumatism. Twenty per cent of all aortic and aortic valve disease above the age of forty years is caused by syphilis.

Rheumatism practically all comes from some focal infection and I estimate that 70 or 80 per cent of the focal infection comes from the teeth and tonsils. I am therefore thoroughly convinced by keeping these things in mind in the management of all cases that pass through our hands, that few cases of heart and vascular pathology will develop in our work. I have tried to show how wide and far reaching heart pathology is, and how much brilliant and helpful work has been done in diagnosis and treatment of the same, but this is not the purpose of this paper. My purpose is to try and stimulate preventive measures. Suppose then if every doctor of every kind, the old, the young, the white, the black, the red, the yellow, the well qualified, the poorly qualified, the surgeon, the specialist, the internist in every clime everywhere, in the sticks, in the suburban districts, in the village, in the town, in the small city, in the large city, and all institutions everywhere will hang up just three words—teeth, tonsils, syphilis—and without fail consider those three things in every single case that passes through his hands for examination and treatment, what would be the result? I predict that if this simple and easy thing could be done, as it should be done, that the next decade would show a rapid and positive decrease in heart pathology instead of the steady increase that we now have. Let us all resolve then that teeth, tonsils or syphilis, shall never claim another victim by our neglect and carelessness.

### Discussion

*Dr. J. A. Munn, McAlester:* As Dr. Scott has so well emphasized, the question of the vital and reserve forces of the heart, rather than of the type of lesion, is the one which must occupy the attention of the medical attendant.

The inability, at the present time, to accurately gauge these forces and to formulate a working basis by which one can prevent an overexpenditure of the hearts' forces, is one of our greatest handicaps in this field of endeavor. Then, too, the social condition of many of these patients prevents them from following the treatment which may be outlined.

Some such plan as that which has been inaugurated by The New York Extension (with peri-

odic examinations) will go far toward finding cases in their incipency instead of after the heart has become irreparably damaged, and should elicit much valuable data on this subject in all of its phases.

*Dr. Scott, closing:* I will only take a minute in closing. The point that I desire to impress thoroughly upon you is that all of these infectious diseases that come through our hands should be picked up by us and eliminated at the time and not allowed to develop a cardiac pathology. It is a fact that even after diseased and degenerated cardiac changes have begun if we pick up the infection and eliminate it then nature will repair the damage done up to that time by its own peculiar process and the individual can continue practically a normal existence for a considerable length of time. It is not right to wait until the individual is incapacitated by his heart disease and its complications and then try to cure disease when, if these infectious cases are properly handled and followed up at the time and immediately following the infection, the cardiovascular-renal conditions that naturally come from these infections will never develop and I think that we will see the percentage of these cases decreased rather than increased.

### AN OUTLINE FOR THE ROUTINE EXAMINATION OF THE HEART AND CIRCULATORY SYSTEM

By FRED J. WILKEMEYER, M. D.  
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The handling of the cardiac and circulatory patient is peculiarly the function of the family physician; that is the studious, careful and solid type not-with-standing all that is being said in these days of so-called specialism derogatory to the family physician. The first and foremost thing is an accurate and painstaking history—know your patient; his limitations; what he can and cannot do and you have gone a very long way in handling his case. At times the history is all important and oftimes the only means of diagnosis. Note how important this is in the early stages of angina pectoris. A business man, the devoted slave to his business, and there are many of his type, is suddenly seized with agonizing pain over the pre-cordia; said pain came on while in the simple act of reaching to take down some small article from the family wash-line. A thorough physical examination elicits nothing; the blood pressure is not unusual.

On the other hand we have the case where we must use every faculty of observation. A man age 33 years, born in Sweden—machinist—F. H. negative habits—smokes 4-5 cigars a day. No alcohol. Gonorrhea 3 times. Last time

a year ago. Bowels always constipated. P. H. 1895, sick in bed for 13 months in Brazil; overlifted himself, resulting in hemorrhage with pain on the left side of chest and palpitation of the heart. Had one hemorrhage at the time, "spit up a couple of mouthfuls". Was short of breath at that time. Well ever since.

P—I—Started 7 months ago; came on while eating; had eaten breakfast in A. M. was finishing up with coffee when he started to vomit; he vomited everything he had eaten; no blood seen in the vomitus. Felt very weak that day. A few days later he had pain under right rib; came on while returning home from work. He had not eaten anything since noon; did not vomit this day and has not vomited since. He has pain every day and it is located 2 inches below the navel; it is continuous throughout the day, from the time he gets up but notices it worse at night on lying down. At times the pain is worse; last time from Thursday night until Wednesday morning he could only sleep for  $\frac{1}{4}$  hour at a time. Tuesday night he slept well for 4 hours. Pain has no relation to food of any kind. Appetite is fine. Stools are "dark-colored but change with food". He was obliged to quit work last Thursday, more to undergo treatment for this disorder. No shortness of breath and is able to do as good a days work as ever. In warm weather he is obliged to get up once a night to urinate; when cold 4-5 times. The stream is of good force and no pain micturition or post. No weakness of legs and able to use hands on lifting as well as ever. Wt. 165-172 lbs, 7-8 months ago. Now weighs 130 lbs. Pulse 72, Temp. 98. Resp. 20. P. E. patient is of good color W. D. and some loss of flesh. He lies on his right side and on lying on his back has some discomfort. M—M of good color. No cyanosis. Tongue is clean, not coated or tremulous, and moist. Teeth in good condition; no Pb. line. Right tonsil slightly enlarged. Pupils: Left greater than right, react to light and distance. Pulses: radials equal, arterial walls easily palpable, somewhat thickened and slightly tortuous; good tension and not readily obliterated; left radial visible at elbow. Arterial walls of brachials easily palpable and can be rolled in the fingers and some suggestion of calcification. Heart—apex at 5th space, nipple; upper border 3rd rib; right border not over sternum; 1st sound at apex loud, rolling and followed by a systolic murmur; 2nd sound not clear and diastolic murmur. At aortic area there is a faint diastolic murmur; systolic murmur of same intensity as at apex. A2 not pure, but greater than P2. P2. plus. Lungs; front and back negative. Abdomen; depressed; of firm musculature; no visible peristalsis; tympanitic

throughout. Stomach normal position and size. Spleen no increase of splenic dullness and edge not palpable. Liver upper border 5th rib, edge not palpable. Inguinal glands enlarged. Arms no wrist drop; good grip. Extremities, no edema and no paralysis. K. J. present. Penis, no discharge or scars. Hgb 90% White count 9000, Smear no stippling or increase in Eosinophils or parasites. Stomach contents normal. We arrived at no definite diagnosis but did consider abdominal aneurism. The patient was sent to the surgical side for exploration. The entire picture to me was some sort of mechanical affair. On exploration we found a pulsating abdominal aneurism, the size of an orange. It lies on a level with the stomach. Today we could probably get more light on the case with a Wassermann and a fluoroscopic examination. Aneurisms are always baffling and at times are so tragic in their results as the following case will show. Tom. K—Age 40; occupation—Sledger at the big forge. F. h. negative. P. H. never been sick in his life except for measles at 13 yrs. Never had rheumatism or sore throat. Habits; denies syphilis; but had gonorrhea and while in the navy had buboes. Bowels regular; no urinary complaint; wife never had a miscarriage; 1 child 3 yrs. of age. Alcohol-prn. Complaint—hemorrhage of three days duration P. I—Friday while at work swinging the 16 lb sledge spit up  $\frac{1}{2}$  cup-full of blood, bright red does not think it was frothy. Did not feel dizzy or faint. Does not think he vomited or coughed it up. "It simply poured out". No dyspnoea; he walks to and fro to work; living about four miles out in the country. He works at the big forge swinging the 16 lb. sledge every day. Past three days after swinging same for about fifteen minutes he gets out of breath a little and has a choky sensation about sternum. Has absolutely no cough; no night sweats. Appetite fine. No orthopnoea. Feet never swell; no night sweats. He eats heartily three meals a day, no pain p. c or two hrs. p. c. No abdominal pain whatever. Says stools are light yellow, never black. No loss of weight. Since first hemorrhage spits up a little blood during the day. Says he doesn't understand why he should do this, as he feels fine and last week he was examined at Naval Recruiting Station and passed muster. For nine years was Fireman U. S. N. and served through the Spanish war. P. E. powerful, W. D. N. man 6ft 1 in, pupils equal and react, no exophthalmus; skin and m. m. good color, no cyanosis of lips. Teeth O.K. Tongue slight brown coat. No hoarseness, tonsils not enlarged Pharynx O. K. Laryngoscopic examination negative. Cervical glands not enlarged; no tracheal tug; no bulging over sternal notch. Pulses; radials; not tortuous; right and left equal and

regular—rate 80 synch, good volume and tension slightly high. Heart apex beat 6th interspace just outside the nipple line, 10 cm. from mid; sternum; L. B. D. corresponds. Width of apex two fingers breadth, powerful, visible and heaving impulse; no palpable thrill; upper border dullness corresponds 3rd interspace; dullness to right and left of sternum 1cm. extending from sternal notch and merging into cardiac dullness. Heart action regular; systolic murmur at apex transmitted into axilla and is preceded by rough sharp first sound; faint systolic murmur of different intensity in 2nd. right interspace and heard best in 3rd. left interspace. A2 greater than P2; P2 plus. Lungs not examined. Liver upper border 6th rib, edge not felt; enlarged veins extend across from right to left costal margin. Abd. neg., K. J. O. K. scar over left inguinal region. Patient was advised to enter hospital and warned of conditions; he left my office and the next morning I found an item of his sudden death that night of rupture of the aneurism into esophagus.

How easily we can miss cases when routine examination will clinch the case at once. I have two women patients who have raised their family of little ones very nicely; one has been urged time and time again to have a gastroenterostomy performed and some summers ago she visited a well advertised world known clinic and was about to be passed as fit for operation when she called their attention to her high blood pressure. I might add here some of our clinics are too prone to become mere automatons, like a Ford factory. This lady's friend has a high blood pressure and has been called a neurasthenic.

The following case brings out strikingly the importance of a most thorough examination of every organ of the body.

This a.m. a brick-layer 65 yrs. of age came to me with the following history. Complaint; stomach trouble 2 weeks duration. Habits—g.u., many yrs ago. F. H. neg. P. H. has always had stomach trouble and remembers while in the Civil War could not hold anything on his stomach; since then has had two attacks of vomiting every year. Vomiting comes on suddenly immediately after meals, again 3 or 4 hrs. after meals; some times the vomitus contains food, at other times greenish liquid very bitter. P. 1 Two weeks ago came home for lunch and after meals started for work but on reaching the gate he had a "terrific attack" of vomiting. That evening he had smothering spell, thought he would not live, called in three doctors. Belched a lot of gas and vomited blood he thinks. For the past two weeks he can't hold anything on his stomach, vomits up everything he eats. Bowels are very watery—

ten a day without cathartics. Has lost thirty pounds. Normal weight 176 lbs. Now weighs, 148. Pulse 100. Temp. 98. Hgb 80%. Urine—large trace of albumen. Sediment—many pus and squamous cells and numerous granular casts. P. E. reflexes O. K. Pupils react; arcus senilis. Radial arteries pipe-stem like tortuous. Right and left B. P. 200. Lungs O. K. Throat negative. Heart left border just over edge of nipple. Apex beat 5th space and heard loudest at edge of nipple. 1st and 2nd. interspace to right and left of sternum dullness 2cm. from edge of manubrium. On placing index finger in sternal notch could palpate a large vessel running transversely which vessel had a strong pulsation. A2 markedly greater than P2. Slight diastolic murmur at aortic area; heart sounds loud and regular. Abdomen retracted, and to the left of the navel on deep pressure some tenderness, no masses felt. Stomach washing came clear and chemistry normal; capacity 1500 cc; in normal position; lowest border at umbilicus; measurements 21 x 14 cm. No visible peristalsis. Diagnosis—chronic uremia; arterio-sclerosis and dilatation of the arch of aorta. This patient came with a note from his physician advising immediate operation for gastric ulcer.

Diagnosis implies merely taking nothing for granted; being painstaking and sticking to details first last and all the time. The good diagnostician is just a little more systematic than the other fellow. We need not rush our patient off to the X-ray man at once or the specialist. In the examination of the patient we should have some set plan to follow which will become a habit with us and the following is an outline I offer for your consideration

### Inspection

Position, dyspnoea, cyanosis, pulsation in the neck, distention of veins?

Pulsations or retraction in chest, seat and extent?

### Palpation

Is the general cardiac impulse heaving?  
Is the apex normally placed heaving?  
Is the apex impulse circumscribed or diffuse?  
Is the impulse under the lower sternum heaving?  
Is there an impulse under the costozyphoid angle? Is there a thrill?  
What is the time and where situated?

### Percussion

Is the area of relative dullness displaced?  
Is it increased to the right or left or both?  
Is intensity of dullness increased under the lower sternum or right border?  
Does the left border correspond with the apex impulse?



Is there abnormal dullness under upper sternum or on either side of it?

### Auscultation

Rate, rhythm?

First sound at apex accentuated? Pure?

Aortic second sound at base accentuated? Pure?

Pulmonic second at base accentuated? Pure?

If murmur is heard:

What is its time? Point of maximum intensity?

Where is it transmitted? Quality and pitch?

*Repeat auscultation lying down both on back and on left side. If anything suspicious is found repeat again after exercise.*

Peripheral arteries sclerosed?

Pulses; equal, synchronous, character, volume, tension, full between beats?

### Stasis in other organs.

Lungs oedema at bases, hydrothorax?

Abdomen; ascites, liver enlarged, tender, pulsating?

Oedema of dependent parts?

*Principal sources of error to be ruled out before reaching conclusion that the heart is hypertrophied or dilated.*

1. Pulmonary causes of displacement:

Hydro-pyo or pneumothorax, fibroid phthisis  
Mediastinal tumors.

Marked emphysema with low diaphragm.

2. Aortic.

Aneurism; lengthening of the Aorta letting the heart drop.

3. Pericardial effusion.

4. Nervousness causing increased force and accentuation of all sounds. (Simulate hypertrophy but is transient).

Is there (1) Muscular insufficiency. (2) Hypertrophy. (3) Dilatation. (4). A combination of all these.

Signs of Insufficiency.

(1). Dyspnoea on exertion.

(2). Dyspnoea on lying down.

(3). Weakness, rapidity or irregularity of heart action.

(4). Diffuse or feeble impulse apex.

(5). Stasis in other organs.

### Signs of Hypertrophy of left Ventricle.

1. Increased force and increased width of apex beat (width of two fingers tips, beat circumscribed).

2. Slight increased dullness to the left.

3. Aortic second increased.

### Of Right Ventricle

1. Increased general cardiac impulse.

2. Increased impulse under the sternum lower.

3. Increased impulse in costo-zyphoid angle

4. P2 accentuated.

### Signs of Dilatation-

Of Left Ventricle;—Increased dullness downward and outward.

Of Right Ventricle;—Increased dullness to the right and slightly to the left. Increased intensity of dullness under lower sternum and at right border.

If heart is damaged but sufficient is the margin of compensation wide or small?

If the heart is insufficient signs of hypertrophy may be masked and murmurs may be lost or changed, so the diagnosis of actual valvular condition may be impossible.

If hypertrophy or dilatation is present with or without insufficiency, is the change due to nephritis, to pericarditis old or present, to fever, to valvular lesions?

If the above causes can be excluded muscular degeneration is the probable condition.

If valvular lesions are discovered determine the condition of the aortic valve first; then the mitral, pulmonary and tricuspid in order.

Then classify according to etiology.

A. Ordinary infection.—(Youth).

B. Syphilis active.—(Middle Life).

C. Arteriosclerosis.—perhaps old syphilis (Old Age).

D. Congenital.—(Childhood).

*If myocarditis degeneration is diagnosed classify according to probable etiology:—*

A. Secondary to fever.

B. Due to myocardial infection.

C. Due to syphilis.

E. Coronary sclerosis, fatty degeneration, or senile atrophy.

*If Valvular infection is diagnosed:—*

Is it recent, chronic, recurrent, active or inactive?

*Upon the correct answer of all the above questions depends the rational treatment.*

The prognosis depends upon the severity of symptoms, duration, origin, seat and degree of lesions; the margin of compensation, the general condition, the age, the willingness, and the ability of the patient to carry out treatment in the best way; the judiciousness of previous treatment and the responses to present treatment.

### Discussion

*Dr. Lea A. Riely, Oklahoma City:* There are two schools of interpretation of cardiac efficiency. The one headed by Dr. Lewis and Price who think the integrity of the heart muscle is best measured by the electrocardiograph. The other headed by McKenzie in which he thinks alone the response to muscular effort is the only means of interpreting cardiac efficiency.

The army circular No.21 paid very little attention to the murmurs of the heart except aortic regurgitant and mitral stenosis when the recruits heart would go back to normal number of beats within ten minutes, after hopping 100 times.

I have seen boys with loudest kind of murmurs go through most intensive training and drilling and their cardiac efficiency was not impaired one bit.

When we see the apex beat within the nipple line and when the heart responds to the tests that McKenzie suggests, I think we need have little fear of it not doing its duty. Many children and adults are kept unduly confined and kept from useful pursuits because the physician is afraid of an irregular heart. Irregular hearts are seldom of grave omen to the patient. Many go through life with irregularities which mean nothing. Sinus arrhythmian extrasystolic are ordinarily indicative of strong hearts.

*Dr. D. D. Paulus, Oklahoma City:* Fellow members: The essayist has given us a very complete and comprehensive outline for the examination of the cardio-vascular system. If we follow such an outline we will save ourselves many embarrassing situations that we find ourselves in, simply because we have overlooked certain things in our examination. I believe that all of us make many more errors of omission than of commission. I think most of us are able to recognize physical findings if we go after it hard enough. The reason the other fellow oftentimes makes a better and more complete diagnosis is because he takes more pains in his examination.

In former days, cardiac examination concerned itself with the detection of imperfect valves, sclerotic arteries, dilated or hypertrophied myocardium. Today if we find irregularity etc. we concern ourselves more than with this finding alone. We ask ourselves what is the condition of the heart muscle itself. For upon the condition of the heart muscle depends the efficiency of the heart as a pump and upon the efficiency of the pump depends the maintenance of adequate circulation.

An imperfect valve may impair the action of the heart but upon the condition of the heart muscle depends whether that heart can carry on proper circulation. Now, how can we determine whether the heart muscle is sound or not? That has been the question for a long time. The search has been for some functional test that will tell us the story. Practically all the functional tests developed so far, depend more or less upon the effects of exercise upon the pulse rate and blood pressure, but they leave out of account the effect of the vasculo-motor system and also sudden nerve strain and fright

etc. These are the factors that keep us from developing a functional test that will tell us the whole true story of the condition of the heart muscle.

In getting the history of a cardiac case, be sure and find out what the patient has been able to do and what his limitations are now as far as physical effort is concerned.

#### A DISCUSSION OF INCISIONS USED IN GALL BLADDER SURGERY\*

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To discuss gall bladder surgery in its entirety is too broad a subject to be discussed in the confines of a single paper consequently I will confine my remarks to one portion of the whole namely the incisions used in operations upon the biliary tract.

That many different incisions are resorted to is but a confession that any one has not filled all the requirements and various operators of progressive mind have sought each in his way to overcome the objections that he has found in the incisions of others before him.

That this subject is a live one is witnessed by recent articles in current medical literature in which discussion of certain incisions have come up and is a further testimonial that the perfect incision has not been found.

The ideal incision would be one that would allow:

1. Of the widest possible exploration of the abdominal cavity.
2. A complete exposure of the biliary tract as near as is possible to the surface.
3. Little or no interference with the nerves and blood supply of the abdominal wall.
4. The possibility of operations on neighboring organs such as the stomach and appendix through the same incision.
5. And gives a minimal chance for post operative hernia. To overcome these obstacles the various incisions have been planned and in order they are,

1. A straight para-rectus incision along the outer border of the muscle. 2. A straight trans-rectus incision in which the muscle is split longitudinally. 3. Mayo-Robson incision which consists of a longitudinal incision over the middle of the rectus extending to within an inch or so of the costal margin then extending the upper end medially parallel to the costal margin as far as the ensiform. 4. Arthue Dean Bevan's incision is along the outer

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border of the rectus with the upper end inclined obliquely upward and inward through all layers and the lower end inclined obliquely downward and outward at the level of the umbilicus through all layers. 5. Kocher's incision is carried in a straight line obliquely from the tip of the ensiform process, two fingers breadth below and at first parallel to the costal margin, after which it descends as far as the muscle fibers of the external oblique, which may be slightly incised. The rectus is divided across its whole breadth and the nerves supplying it, which run obliquely from without downward and inward on the transversalis, are drawn aside. 6. Recently there appeared an article from the Mayo clinic describing an incision extending from the ensiform obliquely downward and outward to a point an inch or two to the right of the umbilicus.

The above incisions are the ones that have best stood the test of time and while there are others such as Kelers, Dons, Perthis etc, they have never become popular except in small spheres.

Just which of the above procedures is best often depends upon the case.

Where a simple cholecystectomy is contemplated without extensive examination of the bile ducts a straight muscle splitting operation is sufficient but when it is desired to examine the bile passages and in addition the surrounding viscera or contemplate some operation other than simple drainage of the gall bladder more room is required and other than the straight incisions are best resorted to.

In America my experience has been that most men tend to the longitudinal type of incision of the border of Bevans or Mayo-Robson type, in England very much the same tendency holds. In France on the other hand most of the surgeons approached the Kocher type of incision.

It is certainly agreed that elevation of the hepatic region and a certain amount of lowering of the pelvis produces the advantageous position of the patient for bile passage work, but in the longitudinal type of incision this same elevation from behind while bringing the gall bladder further forward at the same time places tension on the fibers of the rectus abdominis muscle and in a way counteracts the other manœuvre.

The more nearly the incision runs transversely the better will be the exposure the more the elevation is increased from behind. However there are many people, especially the fleshy, in whom from a transverse type of incision it is almost impossible to remove the appendix, thus it is that those incisions that combine the two directions i. e. Mayo-Robson,

Bevan, Kocher and that lately emanating from Rochester, are the ones which are adhered to by most surgeons.

While it is true that they call for a severance of the muscle fibers yet at the same time experience has shown there is very little tendency to hernia, not nearly so much as in the longitudinal pararectus incisions, and the wounds are easier to close in this notoriously difficult region.

This paper is an attempt to correlate the experience of far more experienced surgeons with the writers own limited experience and is written because to his mind at least there is much that has a practical bearing as there is no surgeon who does work on the bile passages but who has not at times found himself in an embarrassing position for better exposure because of the type of incision that he has chosen for that given case.

#### POST OPERATIVE TETANY DUE TO SODIUM BICARBONATE IN A BABY THREE WEEKS OLD FOLLOWING RAMMSTEDT OPERATION

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This baby was brought to me by Dr. Taylor of Vian for diagnosis; baby three weeks old; normal birth; spontaneous delivery; birth weight eight pounds; breast fed. When baby about two weeks old he started to vomit soon after nursing, which was projectile in character; constipation present,—unable to get any action from bowel; urine very scant; when voided nothing more than brick dust sediment on diaper.

The condition of baby on physical examination was as follows: Weight six pounds, very much depleted, skin dry, and loss of turgor, abdomen retracted, the peristaltic wave running from left to right across the abdomen,—the wave being below the umbilicus, showing a dilatation of the stomach. With these physical findings my diagnosis was made of pyloric stenosis, which I had confirmed by X-ray and fluoroscopic examinations. With the fluoroscopic examination there showed absolutely none of the barium meal had left the stomach after eight hours. With absolute constipation and nothing leaving the stomach, I decided this was purely a surgical case and it would be very dangerous to the life of the baby to try it on atropin treatment or the thick gruel feeding. Dr. P. P. Nesbit was called to do the operation. Due to its depleted condition and the inactivity of the kidneys, due to lack of fluids, we thought best to delay operation for 24 hours to see if we could not get some fluids into the tissues. Sodium bicarbonate and



glucose was given per rectum but was not retained well. On night of July 9th. I washed out stomach with sodium bicarbonate solution and left about two ounces of the solution in the stomach and then gave the baby about 60 C. C. normal saline solution through the longitudinal sinus. The results with the normal saline solution through this route was nothing more than miraculous as the skin got nice and pink and the pulse picked up in quality. The morning of the 10th, before the operation, I again washed out the stomach with sodium bicarbonate solution. Dr. Benj. H. Brown gave the anaesthetic, using ether for same. Dr. P. P. Nesbit did a modification of the Rammstedt. The mass found was the size of a hickory-nut with complete occlusion of the pylorus. The duration of time was about thirty minutes. Patient left the operating table in fair condition. About four hours after operation I started giving sodium bicarbonate solution per mouth in teaspoonful doses. This the baby retained. I then gave breast milk with medicine dropper, one ounce every two hours, keeping up the sodium bicarbonate solution in teaspoonful doses about every 20 minutes. The baby never vomited again after the operation. On the morning of the 12th, two days after the operation, the baby started to have convulsions or spasms of the muscles of the extremities. The condition continued for two days. The baby's condition every other way was very good. I could not understand these spasms of the muscles. Then it came to me all at once that it must be due to the sodium bicarbonate solution, as sodium and potassium are nerve excitants and calcium and magnesium are nerve sedatives. I stopped the soda solution and put the baby on calcium lactate and cod liver oil phosphorized and the tetany subsided. The baby left the hospital one week after the operation nursing at the breast, gaining one pound in the week, never having vomited after the operation.

#### INSOMNIA FOLLOWING ACUTE EPIDEMIC ENCEPHALITIS IN CHILDREN

From clinical observations of cases, William M. Happ and Kenneth D. Blackfan, Baltimore (*Journal A. M. A.*, Nov. 13, 1920), are convinced that persistent insomnia is a fairly common sequel of acute epidemic (lethargic) encephalitis in children. They report six cases. The duration of the insomnia has been seven months, five months, four months and six months. The authors considering it as being important that this condition be recognized in order that the children and the parents may be assured that the children may be regarded as sick children and the parents may be assured that the insomnia and other peculiarities are not due to wilfulness and disobedience on the part of the child. The patients should be placed in a quiet environment, permitted to sleep when they choose, and not awakened for meals and bath. There should be given their noon meal and their evening meal, and a third meal should be given at night. They require careful attention at night, and must be prevented from harming themselves. Sedatives, as a rule, are not necessary and are not satisfactory.

#### PROCEEDINGS OF OKLAHOMA CITY CLINIC, ROUND TABLE, WESLEY HOSPITAL

Calculus, Left Ureteral, Horseshoe Kidney.  
**Dr. A. L. Blesh:** Case—Robust man 40 years of age, giving history covering several years, of pain in left renal region, radiating to bladder, left testicle and penis with attacks of classical renal colic. Associated with this pain, pus and blood were found in the urine microscopically. Also there is a history of macroscopic hematuria.

Both kidneys responded to the dye test, the left a little tardy. Pus and blood in left.

X-rays with left pyelography, orienting catheters in situ showed no abnormality of pelvis or ureter. A shadow very distinct, well demarcated appeared  $2\frac{1}{2}$  inches below the pelvis of the left kidney, which might be in the lower renal pole or the beginning of the ureter. This shadow was easily interpreted as a stone, either in the lower pole of the kidney or upper end of the ureter. Clinical history of renal colics strongly suggested the ureter.

*Diagnosis:* Left Ureteral Stone, Upper Third of Ureter, with Slight Infection.

The shadow indicating a stone at least  $1\frac{1}{2}$  cm. in diameter and the location so far up in the tract, together with the old history and the supervention of infection cast the die for immediate operation.

Operation which proved very difficult first revealed the anomaly of a fused kidney. Fusion was between the lower poles which is the common type. Fusion of the superior poles is very rare. Horseshoe Kidney, according to Morris occurs as 1 to 1000. In this case the ureters both passed *behind* the isthmus which is rare. Usually they pass in front. This fact added to the difficulties encountered in operation since the stone was found in that portion of the ureter lying behind the isthmus. The difficulties of operation were further enhanced by the fact that it was impossible to deliver this anomalous kidney and the thickness of the patient with narrowness of space between ribs and crest of ilium.

At this time, some two weeks following operation patient is doing well.

**Dr. J. Z. Mraz:** *Bladder Stone Removed by Litholapaxy.*

Case No. 7462. Male—age 58 History negative except as follows: About 10 years ago had attack of severe cramp-like pain of sudden onset in left lumbar region radiating downward and forward into left testicle. No urinary symptoms and no macroscopic hematuria. Since then has had several similar attacks.

Six weeks ago had sudden stoppage of urinary stream necessitating catheterization. It has been necessary to use catheter several times since then because of sudden urinary stoppage.

Bladder X-ray by Dr. Anthony of Lawton, Oklahoma, who diagnosed a stone and referred patient to Oklahoma City Clinic.

Physical examination negative.

Cystoscopy—Chronic Cystitis of moderate degree. Median lobe of prostate shows beginning enlargement. Lying free in bladder is seen a round stone the size of a small marble. Its white color contrasts sharply with the reddened mucosa.

Urinalysis—Reaction alkaline. Albumen gross amount. Pus gross amount.

Conclusions—A left renal calculus passed into the bladder and there formed the nucleus of a bladder stone. The irritation of the stone while lying in the bladder invited infection. The infecting agent was one of the pus forming cocci or the proteus bacillus which have power to split urea with the resultant formation of ammonia. This is shown by the alkaline reaction of the urine and the glistening white outer coating of the stone which coating no doubt consists of the phosphate of calcium ammonium or magnesium. These salts are precipitated in the presence of an alkaline cystitis.

The stone no doubt started as a uric acid or urate stone as is usually the case and later received its phosphatic coating while lying in the bladder in the presence of an alkaline cystitis.

Treatment—Under local anesthesia a Bigelow Lithotrite was introduced, the stone caught between its jaws and crushed and the fragments washed out. The washing process was continued until the fluid returned clear.

Patient to return later when another cystoscopy will be done to make sure that no fragments remain in bladder.

**Dr. J. C. Macdonald:** *Chronic Maxillary Sinus Infection*

I will report a case of infection of the antrum of long standing which I operated today because it failed to clear up with irrigations.

The patient, a woman 28 years of age, had an abscessed upper, first molar tooth extracted last November. Soon after this she noticed pain over left antrum, also a foul smelling discharge from nose. Most of the pain in time subsided but the discharge continued.

Two weeks ago she came to the clinic for this condition. Examination showed the left maxillary sinus to be cloudy on transillumination and slight tenderness on pressure. Upon placing a needle through the naso-antral wall

and making suction with a syringe, purulent fluid was obtained.

Under cocaine anesthesia a trochar was forced thru the naso-antral wall and this opening enlarged with biting forceps. The antrum then irrigated daily with Dichloramine-T followed by alcohol. The purulent discharge has lessened very little under this treatment.

Today I operated and made an opening thru the anterior antrum wall, enlarged the opening in the naso-antral wall and thoroughly curetted the granulation tissue from the cavity, closing the periosteum and mucous membrane over antrum opening.

I expect this condition to clear up quite readily now.

**Dr. D. D. Paulus:** *Case of Pellagra and Chronic Hypertrophic Arthritis.*

Patient female, age 54, wife of common laborer from country.

Had ordinary diseases of childhood with good recoveries. Para three. Menopause eight years ago. Never has had any serious illness until four years ago. At that time she developed rheumatism with pains in shoulder and wrist joints. Later also in both knee and ankle joints. Condition was never acute, but has noticed gradual enlargement of knee and ankle joints and to some extent of knuckles.

Present illness started with intestinal derangement four months ago, with indigestion, poor appetite, gaseous accumulations and diarrhoea—stools are from fifteen to twenty daily and are soft and putty like in consistency, generally like thick gruel. Tongue has been red and angry looking and raw-beef-like. Patient states that entire canal feels sore from mouth to stomach. Six weeks ago first noticed discoloration on back of hands and wrists. This looked like a sun-burn, altho a little more cyanotic in color. Also has burning of skin. Two months ago patient's daughter first noticed marked nervousness on part of patient and mental peculiarities which had gotten worse. Melancholia much worse the past two weeks. No night sweats. Has lost 20 pounds in weight during the past four months. Endurance fair. Physical Examination—

Temperature 98.6—Pulse 80. Blood pressure systolic 126. Diastolic 80. Pupils react promptly to light and accommodation. Throat negative. Upper teeth artificial. Lower—many decayed old stumps and poor condition. No sores on buccal membrane. Tongue red and angry looking, beef-like in character. Glandular system negative. Chest slightly impaired resonance right apex. No rales. Heart normal. Liver and spleen not palpable. No abdominal tenderness. Reflexes O.K. Extremities back of hands and wrists show

Erythematous discoloration somewhat deeper in color than is usually seen in Pellagra. Present on both arms and symmetrical in character. Knuckles on both hands enlarged. Both knee and ankle joints show marked enlargement—result of chronic hypertrophic arthritis.

Laboratory—Wassermann negative. Urine analysis negative.

The symptomatology and findings in this case indicate that two conditions are present. Pellagra and Chronic Hypertrophic Arthritis. The discoloration on the back of her hands and wrist which was more pronounced than is ordinarily found in pellagra, might lead one to think of Addison's Disease, but in Addison's Disease we have a mere pigmentation and no stomatitis. Usually in Addison's Disease we find tuberculosis in other parts of the body. Besides that, these patients complain of great weakness and heart action is very rapid which is not found in this case. Taking all the symptoms and findings into consideration, we feel reasonably sure that the diagnosis of Pellagra is justified. Also, the findings of Chronic Hypertrophic Arthritis are quite clear, so that in this patient, we have two rather severe conditions, which is rather unusual.

#### METHOD OF TREATING CONGENITAL SYPHILIS

A method of using specific drugs is formulated by John A. Fordyce and Isadore Rosen, New York (*Journal A. M. A.*, Nov. 20, 1920), which, by its simplicity of application and results, may justify its further employment by those who have to do with sufferers from syphilis. Neo-arsphenamin and mercury are used intramuscularly with a special needle to insure the proper location of the drugs in the gluteal muscles. If the infant is very much under a poor musculature, mercury alone is given at weekly or biweekly intervals until there is an improvement in the general condition, after which the injections of neo-arsphenamin are begun. The mercurial employed is the mercuric chlorid put up in palmatin in individual collapsible ampules in doses of from one-tenth to one-eighth grain, or larger for older children. The object in giving a soluble mercury in oil is to favor slow absorption of the drug. In this form it requires about three or four days for absorption. The neo-arsphenamin is put up in individual ampules containing from 0.1 to 0.2 gm. and large enough to hold 5 c. c. of solution, the object being to dissolve the drug in the original container. After the ampule has been immersed in alcohol to insure its proper sealing and sterilization, it is dried with sterile gauze, the end broken off, and from 2.5 to 3 c.c. of cool sterile, freshly distilled water injected into it by means of a syringe. Then a Luer mercury needle long enough to reach to the bottom of the ampule is attached to the latter, and the fluid is drawn into the barrel, alternately expelling and drawing it up to hasten complete solution. The complications following the intramuscular injection of neo-arsphenamin such as abscesses and infiltrations, can be avoided if the drug is injected deep into the muscle. To prevent its leaking into the subcutaneous and adipose tissue, the authors have devised a special needle. After the injection, the needle is rapidly withdrawn and a cotton pledget held firmly over the site for a few minutes. The site of injection is the same as for the mercurial treatment; half of the solution is injected into each buttock previously cleansed with tincture of iodine.

# THE JOURNAL

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Articles sent this Journal for publication and all those read at the annual meetings of the State Association are the sole property of this Journal. The Journal relies on each individual contributor's strict adherence to this well-known rule of medical journalism. In the event an article sent this Journal for publication is published before appearance in the Journal, the manuscript will be returned to the writer.

Failure to receive the Journal should call for immediate notification of the editor, 508 Barnes Building, Muskogee, Okla.

Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

Advertising rates will be supplied on application. It is suggested that wherever possible members of the State Association should patronize our advertisers in preference to others as a matter of fair reciprocity.

### EDITORIAL

#### THE SOUTHERN STATES PELLAGRA FIASCO

Fiasco, an unwarranted one, attaching to itself irremediable injury to a section of the United States wholly undeserving of the treatment born of misinformation, overzealousness and possibly more or less desire to bask in the limelight of publicity, is the only verdict possible as a result of the recent newspaper notoriety given the subject of alleged widespread ruin and fatal epidemic of pellagra over the southern states. Those in position to know the situation, men of scientific ability, students of the disease for years, on the ground and familiar with the actual conditions, feel justly outraged at the situation which has been created by premature announcement of existence of relatively, an insignificant number of cases. Seale Harris, Editor and Secretary of the Southern Medical Association, the largest organization and Journal in the country, except



the A. M. A., who has made special studies and researches for years on the subject of pellagra, states in his September issue that if the people of the Northern States were aware that there were less than 10,000 cases among the 35,000,000 people there would be no more concern over the matter. He also writes that the South has been irreparably damaged from an industrial standpoint in that thousands of white laborers, immigrants who otherwise would go to the south and find employment in development of its great resources are deterred from so doing by the sensational news they read. He takes a just, but severe rap at Goldberger, who he states is to be the "Moses who will lead the half starved? Southern people out of the wilderness", who had also prophesied that the epidemic would recur in 1921. Dr. Harris proclaims that the "half starved" people concerned are eating three well balanced meals daily, but they refusing to heed the prophet's warnings, Goldberger had appealed to the authorities at Washington, and they forthwith sent the edict broadcast, that the multitudes in the South, even though they do not believe they are in the midst of famine and plague must be saved by a paternal government. Dr. Harris, further noting Goldberger's claim that the etiology is due to an unbalanced diet, which claim had been brought forth by Deeks at the Canal Zone in 1908, six years prior to Goldberger's "discoveries", the latter, "Due to very clever propaganda Goldberger's theory has been accepted by many physicians." "Many others, however, both before and after Goldberger's theory was announced, believed that malnutrition is an important predisposing factor in the production of pellagra, as it is in tuberculosis; and that the primary cause is probably a gastro-intestinal infection of some sort." Dr. Harris further says: "Since so much has been said about Goldberger's experiments, which by the way have not been verified by others, they should be repeated by an expert in nutrition like MacCollum, collaborating with bacteriologists and epidemiologists to prevent possible infection". It has been pointed out by those who do not believe in Goldberger's theory that his experiments were carried out in the state in which pellagra was most prevalent; and that those on whom experiments were made may have been infected by some organism in the food, or the infection may have been carried by an insect. They therefore believe that before Goldberger's theory is accepted his experiments should be carried out during the winter months in Maine or North Dakota or in some other state in which there is no pellagra."

Dr. Harris himself happens to be no ordinary authority on the subject of pellagra. Carrying out experiments both before and after the

World War in Europe. He calls attention to the food and nutritional conditions of the populations of Germany, Belgium and France: "were half starved, having lived for years on an unbalanced diet, low in proteins and in butter fats, yet pellagra does not exist in those countries. Tuberculosis, scurvy and other diseases, in which a deficiency diet is an important predisposing etiological factor, had increased; but it seemed that the infection or something besides a deficiency diet, was not present in those countries, or there would have been many cases of pellagra." Dr. Harris, one of the South's most agreeable, able, courteous, manly men, seems "peeved" over the whole thing, and especially the methods used by which injurious results have been created. We agree that some one either in misguided enthusiasm or deliberate and reckless disregard of results, so long as the publicity craved was the end, has distorted the actual conditions beyond any reasonable acceptance. We of Oklahoma, so far as a brief inquiry shows, had about forgotten pellagra, over which, a few years ago, there was furor far out of proportion to the conditions existing, an importance like unto a mountain out of a mole-hill being the actual state of affairs; until we were suddenly electrified into a state of reserved scepticism, this time, applying a proper caution to the press dispatches picturing the horrors existing, always, "somewhere else", never a tangible, fact to convince the doctor that ruin stalked on every side, but always "reports" from the other locality. Digesting such public health reports as were available for Oklahoma, nothing startling or alarming is to be seen, conversing with physicians whose work carried them over a wide scope of country, they had observed no rise in number of sufficient gravity to excite alarm, so, where does this Will O' The Wisp hail from? The only solution of the origination of the sensationalism lies in the belief that some one spoke without the book. We hope the Surgeon General will cause an investigation of this made, and then on the findings do the right thing. We have had too much of experience wherein such wrongs have been allowed to go unrighted simply because some official of the Public Health Service might be humiliated by a proper placing of the responsibility. If the Public Health Service wishes to retain the respect of the profession which has always given it loyal support in the hour of need, then we expect these sectional slanders and libels to cease. This seems to be the opinion of every editor whose state is involved in the matter.

In passing we should also, once more, remind our profession of the value of prompt report of these infections. The State Commissioner of Health of Tennessee takes occasion to warn

the Tennessee doctor that if proper reports had been made as the law requires, there would be no difficulty in exactly gauging the situation as to pellagra in that state. As they were not made it was necessary to call for a special report from more than two thousand physicians. A mere glance at the record in his office should have shown him the exact number of cases existing.

#### REPORT OF DR. L. S. WILLOUR, DELEGATE TO BOSTON MEETING AMERICAN MEDICAL ASSOCIATION

It was the sense of the House of Delegates of the American Medical Association that each States Delegate should submit to the members of his State Association a report of interesting features of the proceedings of the House. Of course complete reports have been published in the Journal of the American Medical Association, however, I am sure that but few busy doctors take the time to wade through all this material.

To begin with I will say that there was much work done by the House at the Boston Meeting, the members of the House having very little time to attend the Scientific Sections. Some subjects required much discussion and the House resolved itself into Committee of the Whole for consideration of the subjects of State Medicine and a Resolution to the President of the United States regarding medical activities.

The Addresses by Speaker Dr. Dwight H. Murray, President Dr. William C. Braisted and President Elect Dr. Hubert Work contained many good suggestions all of which were given careful consideration both in Committees and on the floor of the House.

In the Secretary's report the increase in Fellowship was noted. The net increase being 3925, however, it is with regret that it is found that Oklahoma is the seventh lowest of the States in percentage of subscribers to the Journal, A. M. A., only 37% of the registered Doctors being subscribers, while the average for all the States is slightly over 51% and in some cases as high as 78%.

The Council on Health and Public Instructions viewed with considerable encouragement the position taken by the new Administration relative to Public Health and Human Welfare and the following resolution was adopted.

To The President Of The United States, Greeting.

"The American Medical Association through its executive body, the House of Delegates, desires to express its appreciation of your general attitude toward Public Welfare and your evident desire to coordinate interrelated departmental activities and functions.

The House of Delegates pledges the support of the American Medical Association in working out the details looking toward the culmination of such worthy purposes as would increase the efficiency of public health measures and insure the wisest supervision under *medical* direction in those departments requiring medical knowledge."

An important resolution which was passed by the House was relative to the admission of patients with pulmonary tuberculosis in general Hospitals, the resolution follows:

Resolved that the American Medical Association recommends that general hospitals in all parts of the United States should provide separate rooms for the care of tuberculous patients, and that patients be never denied admission, at least in emergency and for temporary periods, because of the character of the disease from which they are suffering.

The following recommendation from the Council may well be noted by each physician that he may do his part toward bringing about a realization of these suggestions.

1st. That it is desirable that the nature and methods of transmission of communicable diseases should be taught in the public schools.

2nd. That teachers in our public schools should know something about communicable diseases and what should be done with pupils under their charge developing these diseases.

In only five States are there laws requiring such knowledge or instruction. Oklahoma might well have such a law.

A resolution was passed asking that a committee from the American Medical Association be appointed, for the purpose of calling upon the Attorney General of the United States and conferring with him as to the practicability of obtaining decisions from the United Supreme Court which will remove existing uncertainties as to the meaning and application of the provisions of the Harrison Law.

A summary of the report of the council on Medical Education and Hospital follows:

1. One of the most effective methods of work carried on by the Council on Medical Education and Hospitals has been the annual conference on medical education which resulted in bringing about a unanimity of action between the various agencies working for the improvement of medical education.

2. The work of the Council has expanded to cover preliminary education, the undergraduate medical curriculum, hospitals in their relation to clinical teaching and the intern year, graduate medical education, and graduate courses for the training of specialties. Last year through the action of the House of Delegates, the Council's function in relation to



hospitals was broadened to include the general survey of all hospitals.

3. The reorganization of medical education, which was the original object for which the Council on Medical Education was created, has been practically completed. With the broadening of the Council's function, however, there still remains much to do.

4. There is but one science of medicine, which cannot be subdivided into specialties or limited to the eye, the heart, the stomach or other region; it covers the entire human body in health and in disease.

5. A careful study of the present situation shows an excessive trend toward specialism which is largely due to the present faulty undergraduate curriculum. Further-more many are assuming the function of specialists who have not attained adequate training in their chosen specialty.

6. The undergraduate curriculum should be reorganized so as to give the graduate a more thorough grounding as a general practitioner of medicine and less emphasis should be given to certain specialties.

7. Medical students should have their attention especially called to the unusual opportunities for study and research and the other advantages of general practice, as well as to the increased importance of the general practice of medicine.

8. It is in the practice, or art of medicine where specialization properly comes and training in each specialty comes properly in graduate courses. Minimum suggestive standards of instruction in the various specialties were represented in a series of reports at the Council's conference in March, 1920.

9. There are dangers in specialism unless (a) the specialist has had a broad training and experience in general medicine as a foundation, or (b) unless patients sent to specialists are first carefully examined by a broadly trained general practitioner, who in a general way controls the diagnosis and therapy in the case.

10. The hospital statistics published in the recent Hospital Number of the Journal show that 56 per cent of all the counties in the United States do not have hospitals. Indications are that the chief trouble in connection with the hospital supply in the United States is inadequate distribution.

11. The enrollment of medical students reached its lowest ebb in 1919, when 13,052 students were enrolled. In 1920, there were 14,088 and, based on reports received from most colleges, the present enrollment is approximately 14,850.

Many definitions of State Medicine were introduced and the discussion was long and heated. It was finally determined that the following resolution would be adopted which makes clear the opinion of organized medicine regarding health activities of the State and Nation.

Resolved, By the House of Delegates of the American Medical Association that it approves and endorses all proper activities and policies of State and Federal governments directed to the prevention of disease and the preservation of the public health.

There was much discussion of the attitude the Association should take relative to the Liquor Question and the prescribing of alcoholics. The question of the food value of alcohol was referred to the Council on Scientific Assembly for report at the next annual meeting. As to prescribing the following resolution was adopted.

Whereas, Reproach has been brought upon the medical profession by some of its members who have misused the law which permits the prescribing of alcohol, therefore be it

Resolved, That the American Medical Association now expresses its disapproval of the acceptance by a small minority of the profession of the position of being purveyors of alcoholic beverages.

The Committee on reappointment of delegates had as one of its members Dr. L. J. Moorman of Oklahoma City. There were very few changes made in the reappointment, however had the members of our State Association been more prompt in paying dues this State would have been entitled to an additional delegate. Note this loss and pay your dues in January hereafter.

The election of officers resulted as follows: President-elect, Dr. Geo. E. de Schweinitz; Vice-President, Dr. Frank B. Wynn, Indiana; Secretary, Dr. Alexander R. Craig (re-elected); Treasurer, Dr. Wm. Allen Pusey, Illinois (re-elected); Speaker of the House of Delegates, Dr. Dwight H. Murray, New York (reelected); Vice-Speaker, Dr. Frederick C. Warnshuis, Michigan (re-elected), Trustees, Drs. Frank Billings, Illinois, Wendall C. Phillips, New York and Thomas McDavitt, Minnesota, all re-elected.

The Association will meet in 1922 in St. Louis. The Secretary has been directed to reserve hotel accommodation for members of the House of Delegates, to be held ten days before the meeting, a policy designed not merely to favor the delegates but to provide greater facility in handling the committee work of the House of Delegates.



## NATIONAL "CANCER WEEK", OCTOBER 30 TO NOVEMBER 5th.

Announcement that the above dates have been selected for the observance throughout the country of "Cancer Week", have been made by The American Society for the Control of Cancer. Details of the plan the Society suggests should be followed may be obtained from the society, 25 West 45th St., New York.

The plan suggested contemplates both lay and medical activities, the former to be under direction of medical men selected to execute the details in each community. The State Chairman, Dr. E. S. Lain, Oklahoma City, will undertake dissemination of proper news articles which will be carefully drawn and edited in order that no mistake, possibly resulting in wrongful information, be scattered to the people who, naturally, must be carefully guided if they are to appreciate even the grosser perplexities incident to the subject of cancer.

The plan is worthy, will be of great use and good, if it is carried out, and it goes without saying that we of Oklahoma should be alert in the matter. Every medical society of the State should hold an early meeting, there formulate plans for a future meeting of their society, as well as naming an active committee to see to it that meetings are held, lectures and speakers provided, who will carry the message to the people. Women's clubs may always be relied upon as fertile fields for this work, for the more intelligent fully appreciate the menace of cancer to their sex. They also appreciate, it must be regretfully admitted, the fact that much of the cancer which our profession sees, but sees blindly, is **preventable**, that somewhere along the line, as a rule, the doctor is to blame more than any one for the cancer which now is seen to be a hopeless matter. They understand fully, also, that a simple early operation, appropriately followed by X-ray does much to save human life, they know more about the virtues of radium, too, than some of our profession knows. Well this interest should be capitalized and in every locality it is hoped the doctor will lead the procession in proper publicity to the end that the real object, prevention, be attained. It is now time for our county societies to take up their work for the ensuing year and this work will lend zest to the beginning, for it is truly one of the most intensely interesting problems the doctor must solve, before us today.

To the county society officers observing this, it is urged upon you to at once take the lead in this work, call your members for their meeting and arrange both our professional meeting as well as one or more during this week, which shall be open to the public. See to it that this latter is very carefully thought out in

advance, that fluent speakers, with their subject under control, be solicited to present the subject. By following this suggestion we will be carrying out our part of the responsibility. The doctor only is fitted to undertake the work and some of the responsibility attaches to every man reading this message.

## THE NATIONAL BOARD OF MEDICAL EXAMINERS

The National Board of Medical Examiners has just announced the passage of the first five years of its existence, the report issued by Mr. Everett S. Elwood, Managing Director, gives a resume of its activities which indicates that it is upon a permanent stable basis, has done much good and proposes gradual broadening of its field of work.

Founded in 1915 by the late Dr. William L. Rodman, Philadelphia, proposing to tender applicants with certain qualifications examination, and, if after qualifying, issuance to the candidate of a certificate which can only mean the holder is possessed of a high degree of professional ability and worth, and which is given recognition for reciprocity by twenty of the states boards as well as the Conjoint Board of England, the Triple Qualification Board of Scotland, the American College of Surgeons and the Mayo Foundation of the University of Minnesota. Examinations have been held in Washington, Philadelphia, New York, Boston, Chicago, St. Louis, Rochester, (Minn.) and Minneapolis. During the war combined examinations were held at Forts Oglethorpe and Riley. Of the 325 candidates examined 269 passed and received certificates. The board has the endorsement of every official medical organization of merit in the country, including the Army, Navy and Public Health Service.

It is proposed to appoint subsidiary boards in order to facilitate the work, at San Francisco, Iowa City, Denver, New Orleans, Baltimore, Galveston, Cleveland and Nashville in addition to the cities above first named. Examinations are divided into three parts, the first in fundamentals, the second a written examination in Medicine, including pediatrics, neuropsychiatry and therapeutics; Surgery, including applied anatomy, surgical pathology and surgical specialties; Obstetrics and Gynecology; Public Health, including hygiene and medical jurisprudence. The third part being a practical examination in Clinical Medicine, with medical pathology, applied physiology, clinical chemistry, clinical microscopy and dermatology; Clinical Surgery with applied anatomy, surgical pathology, operative surgery and the surgical specialties of the diseases of the eye, ear, nose and throat; Obstetrics and Gynecology; Public Health, including sanitary bacteriology and the communicable diseases. Parts one and two

will be written examinations, three entirely practical and clinical. A fee of \$25.00 is charged for the first two; \$50.00 for the third part. The Carnegie Foundation has appropriated \$100,000 to cover expenses for a period of five years.

M. W. Ireland, Surgeon General was elected President; J. S. Rodman, Secretary-Treasurer and E. S. Elwood, Managing Director. Information as to all details may be had by addressing the latter, Medical Arts Building, Philadelphia.

### DISCLOSURES IN VENEREAL CLINIC WORK

Nearly three years ago the writer was assigned to the directorship of the venereal disease control work at Muskogee of the Interdepartmental Hygiene establishment of the U. S. Public Health Service and the State of Oklahoma. At that time his personal experience was perhaps somewhat wider than the average by reason of years of connection with various institutions having for inmates that class popularly supposed to be more prone to such infections. The experiences since the work was undertaken have been of such wide range the conditions met and known to exist, both as to the unfortunate patient and their professional attendants, that it is believed a noting and publication of some of the commoner phases will be of worth to our readers, as well as their charges in the future. The term "unfortunate patient" is used advisedly, for it will be shown that in many instances the treatment, or lack of it, accorded these unfortunates is wholly inexcusable from either the standpoint of morality or due regard for the ideals of an honored profession.

#### Popular And Erroneous Misconceptions:

Perhaps no experience incident to the work brings as many startling stories of the beliefs inculcated in the minds of these patients, or the misinformation, utter lack of information, or half stated and poorly understood facts concerning their infection, its initiation, course, and necessary proper treatment. The many stories they tell can leave only the conclusion that they have been both badly treated and misadvised as to the peril facing them, that their attendants either do not know or care what the consensus of best scientific opinion is as to the means best used to eradicate the infections or that they are simply considering the case from the standpoint of financial remuneration after which their interest is at an end. Of all the beliefs, that voiced in the statement that "four shots" cure syphilis or that absence of urethral discharge is evidence of cure are the most common, and of course, sadly productive of incalculable damage and wrong, very often

to the innocent and helpless. Another neglect, only born of carelessness, is that due to prostatic infections. The history of months of treatment by urethral irrigation sans a thought as to the source of the discharge, commonly the prostate, is so common as to be unbelievable. Our advices are that some of these men have spent hundreds of dollars without ever having prostatic examination. Other conditions noted and equally without excuse are those wherein both husband and wife are infected or one of them, without a hint to them of the danger to their offspring. The case wherein infection has been passed from child to parent or vice versa is far too common. Usually the history is given that their attendant never gave them the slightest hint of the danger. Nearly none of them know the danger to the eyes of gonorrhoeal infection. Recently a 65 year old mother and a ten months old babe applied the same day for anti-syphilitic treatment, both due to easily avoidable causes had the infected persons only known their danger and had that warning which common dictates of humanity indicates as proper and their due.

Oklahoma physicians who have not read the Venereal Disease Control Law, should, for their information secure a copy and peruse its requirements, for its terms apply to every class of us, and these diseases are so widespread that no physician, regardless of his specialty, is free from contact with them. The law requires report of cases, treatment of them, and a written discharge on final cure; yet how few of us comply with those demands. The contention that compliance is unpaid and useless service is without the question. One should hold his duty to society a little above the mere avoidance of a small amount of trouble.

#### Wide Scope Of Infections:

The classes carrying the venereal infections are popularly supposed to be limited mostly to a certain low grade of our people. This is further from actuality than one dreams unless he takes occasion to personally investigate the matter. None of us but what are daily thrown in contact directly or indirectly with them. And no amount of delusion will dissolve that idea. They are ever present and all about us. If the men in charge of venereal work in Oklahoma were called upon to point out every person they knew to be infected in the days casual visit about their towns, the banquet table, the social function, the restaurant, the hotel, barber shop, brocery stores, would show a sudden hegira of guests filled with the horror, which latter is also born of the very generally existing misinformation passing as current to the diseases. Investigation of the occupations of the infected cover such a wide range of employments that it is at once seen that no one is exempt from the ravages.



### Current Beliefs As To Treatment:

A positive instruction exists in the writers office to under no circumstances inform the patient of the blood findings taken after the first series of treatment a months rest, and the second Wassermann is taken. As surely as the patient hears the word "Negative", he breaks into a smile, jauntily flits out of the office never to return, convinced in his immature mind that his troubles are over. Often they are, but the cerebro-spinal, meningitic, neurotic, tabetic horrors among the insufficiently treated are eloquent testimonials of the severe possibilities following upon that certain large number who in after months or years have a return of the infection deeply imbedded upon their nervous system, to the stage where eradication is impossible and the patient most fortunate even if it is halted at that dangerous stage. This experience is common despite the most carefully, emphatically stated information given the case at the beginning. They are told bluntly that their case is not wanted, that possibly treatment then is worse than none if they follow the foolish, but generally conceived idea in the public mind, that a "Negative" blood test means cure. They fully agree that they will faithfully follow instructions, that regardless of the second blood test findings they will undergo a second series to clinch the matter, yet all this is promptly forgotten when they are made aware that their blood is now free from the infection. One such, told that the treatment he was about to receive might have almost miraculous results apparently, that he would think then he had no trouble, would doubt the diagnosis even, referred, though he was with a diagnosis of syphilis by two physicians of his home town; never returned after the first treatment. To make an example of the case, the matter was referred to the Sheriff's office, the man brought in, and who can blame the fellow for failure to return? If he was a silly fool, how much greater his physician? For this was the story he told, reduced to a few words, "Doctor, they must shortly been nothing the matter with me, my doctors said I must shortly not had syphilis, I got well so fast". This mind you, in the very face of warning that that would possibly be the course he would follow. One despairs, however, of ever getting anywhere when the physicians of the country aid and abet the dangerous misinformation. This story, with slight modification may be reiterated nausea ad nauseam. Couple this with the false idea allowed to go over the country unchallenged and unchecked that absence of clinical symptoms, negative blood tests, lack of discharge, healing of a superficial, initiatory ulcer means cure, then the despair becomes greater than one should have to experience.

### VALUE OF POSITIVE AND NEGATIVE WASSERMANN'S

That clear understanding as to the commoner variations and possibilities surrounding the Wassermann test is not only not appreciated by the rank and file of our profession, but that this lack of appreciation is naturally passed on in attenuated degree to many of the patients themselves is only too evident on consulting the record. In the first place the general acceptations and limitations incident to this test by those we look upon as competent guides and authorities should certainly be the common knowledge of the general practitioner for to him the patient appeals for advice as to treatment more than to any other. That report of a negative finding has most dangerous possibilities is only too well appreciated by the initiated, that it may be due to many factors seems to have been entirely overlooked by those who in position to advise, are found giving dangerous or worthless advice and the beginning of ruin for the patient is set up. That negative findings may be due to any one of a myriad of causes when the patient is actually infected with syphilis is one of the regrettable features of the problem. Reasonable precaution would seem to justify the demand, however, that these dangerous exceptions be known by the averagely informed physician. That they are not is a severe reflection upon us, but the shoe must pinch the foot of such wearers and only ruthless exposure and publicity will place the blame and possibly minimize repetition of the same old recurrent errors in this respect in the future. A finding may be false, due to switching of specimens, to certain unknown chemical changes in the blood, who knows what they may be or may truthfully say such possibility is not with us? To faulty technic. It may be actually the case, when the infection is not yet widespread. The possibility of various substances in the alimentary tube of the patient being productive of a negative Wassermann, when syphilis actually exists has long been raised, that alcoholics present such deviations from the rule, has long been known, yet how many of our average practitioners, the ones who are entrusted with securing the specimen by the patient, are aware of this phenomena or advise their patients of it. That the alimentary tract should preferably be empty on taking the specimen is the firm belief of many good men. How many, in the event of such negative findings, dismiss the matter as a closed incident, when it is not, but a case of insidious infection, surely bringing the victim to ruin? Certainly too many you will grant after a few moments retrospection and calling up of past memories.



### Prevention Most Simple And Effective:

Questioning these patients elicits further the amazing information that nearly never have they been advised by the different physicians to whom they have applied for treatment as to the positive fact that very simple prophylactic measures applied within reasonable time after exposure is almost surely preventive of the infection. Like neglect has been their mode with reference to the ease of prevention of infection by the gonococcus, the constant danger and severity of the infection to the eyes the ease of infecting others with any one of the venereal diseases. That easy duty of the humane physician, if the stories the patients tell, and some credence must be given the statements for there is too much unanimity of the story for it to be entirely discredited; has been almost univesrally forgotten or neglected by the only person who might advise them and the only one who has the opportunity to give such advice, certainly the one who owes that duty to society at large as a part of his professional duty incident to the relation we bear to the public at large. Dismissing the matter with the statement that it is useless to attempt to advise such people does not exculpate us from that failure of duty. The trend of the times indicates that people are surely evolving to the point where they are informed largely as to the dangers of the various infections and the means of their prevention. We are their only advisors. If we neglect that function, which should be performed with clarity and intelligence at every opportunity, the potential ruin we may make possible must be chargeable to us only as the responsible derelict of duty.

If these people and their physicians only knew the fact and acted intelligently with the information in mind and the absurdly simple calomel ointment or the weak solution of silver nitrate was used, we would soon witness a phenomena bordering on the millineum throughout the Nation. Our insane hospitals and sanitariums for the mental defectives would have a sharp decline in admissions and much of the woe we will continue to witness would be obviated. Our discouragement is due to the general callousness with which the subject is treated.

(Ed. note—The subject above considered seems of such importance that full discussion of it can be productive only of good, possibly some one who will not otherwise be helped may be aided to a better understanding. It is admitted, of course, that the general principles discussed are very well understood and the best course followed by a large number of our profession. But, the damage comes from the neglect of our careless minority, to them this is addressed and will be continued at some future time. The Editor)

### A MESSAGE OF URGENCY TO OUR COUNTY SOCIETY OFFICERS AND THE MEDICAL PROFESSION OF OKLAHOMA

My dear fellow physicians: Doubtless many of you are already equally familiar with the grave problem of increasing frequency of cancer throughout the United States. At first we were inclined to believe that this was only a matter of better vital statistics, however, more recent accurate statistics seem to prove that this disease, as a cause of death, is in reality on the increase.

In brief, according to the United States Bureau of Public Health, between ninety and one-hundred thousand deaths now occur annually in the United States from cancer. This being true, we realize that physicians as well as the laity should take a more active interest in the study of the etiology as well as the control of cancer. The medical profession knows very well that this mortality rate could be reduced if the laity were trained to consult the physician at an early stage when cancer is only a localized disease. Such result has been accomplished in recent years in the study and control of tuberculosis.

Having this purpose in mind, in the year of 1913, a group of physicians met in New York City and organized what is known as "The American Society for the Control of Cancer." The world war soon followed and interest in this organization somewhat varied, however, during the past two years, this society has again become active and has now in process of organization a working force in almost every state in the Union.

You are aware that this society is sponsored by Doctors Robert Abbe, New York City, Donald C. Balfour, Rochester, Minn., John G. Clark, Philadelphia, Rudolph Matas, New Orleans, Frederick J. Taussig, St. Louis, and many other such men of national reputation.

The work consists of the distribution of literature upon vital and well known facts upon the subject of cancer, as well as lectures given before public gatherings of physicians and the more intelligent of the laity. This work is carried on very similar to that of the Anti Tuberculosis Society with which you are already familiar.

The directorship for the State of Oklahoma was tendered to me last March. I accepted this honor though realizing that the undertaking carried with it a large responsibility for which I felt incapable except that I should have the complete cooperation and assistance of the best of the medical profession within this state. I am now appealing to you for volunteers to assist me in this work. I shall especially need

your assistance for a seven days' campaign to be designated as Cancer Week from October 30th to November 5th. This Cancer Week campaign is by special request from our National Society with headquarters at 25 West 45th Street, New York City.

Please let me have enough volunteers at the earliest possible date that this work may be put over in a manner creditable to our profession.

Everett S. Lain, State Director for American Society for the Control of Cancer.

### *Editorial Notes—Personal and General*

Dr. C. O. Lively, Depew, has moved to May.

Dr. B. C. Goldberg, Elk City, has located in Frederick.

Dr. A. P. Brown, Davis, has returned to his old location, Sulphur.

Dr. W. P. Longmire, Sapulpa, has returned from visiting the Chicago clinics.

Dr. O. J. Colwick, Durant, is attending the surgical clinics of Rochester and Chicago.

Dr. W. R. Leverton, U. S. Public Health Service, visited his old home, Hobart, in August.

Dr. Carl Puckett, Pryor, has returned from Chicago where he has been doing special work.

Dr. and Mrs. R. H. Harper, Afton, took their vacation by motoring over Arkansas during August.

Dr. and Mrs. L. J. Moorman, Oklahoma City, have returned from a vacation to Colorado resorts.

Dr. and Mrs. W. E. Dicken, Oklahoma City, are back at home after spending the summer in Colorado.

Dr. W. P. Lipscomb, Oklahoma City, announces removal of his office to 501 American Nat. Bank Building.

Dr. A. S. Risser and family, Blackwell, have returned from their stay at their summer home, Bella Vista, Ark.

Dr. and Mrs. H. A. Conger, Duncan, have returned from a six weeks automobile vacation to various Colorado points.

Dr. J. H. Laws, Broken Arrow, who has been undergoing treatment at the Mayo Clinic is reported as improving rapidly.

Dr. L. A. Connor, Colgate, narrowly escaped serious injury when his car skidded from the road. The car was badly wrecked.

Dr. and Mrs. J. H. Kay, Durant, are in Nashville, Tenn. where Dr. Kay will spend the next several months doing special work.

Dr. and Mrs. L. M. Sackett, Oklahoma City, are motoring over the Southwestern states. Before they return they will visit Mexico.

Dr. J. C. Matheny, Lindsey, has moved to New Orleans where he is attached as Resident Surgeon to the Eye, Ear, Nose and Throat Hospital.

Dr. C. A. McClelland, Miami, was recipient of minor injuries when his car left the street and contacted with a high embankment and the curb.

Dr. J. C. Brodgen and C. C. Hoke, Tulsa, announce opening of offices at 736-737, Mayo Building. They propose to practice surgery and diagnosis.

Dr. and Mrs. A. P. Brown, Sulphur, have returned from an extensive trip of several months which included all the Pacific states, Canada and Mexico.

Dr. T. M. Berry, Hominy, was seriously injured as a result of an altercation with a negro woman. The affair is said to have arisen over an unpaid bill due the physician.

Dr. J. T. Martin, Superintendent of health for Oklahoma City, who underwent a major operation at Laramie, Wyoming, has been removed to Denver where he is convalescing.

Dr. A. J. Jeter, Clinton, has joined that large and rapidly growing class of our profession who have lost their cars. His was recovered, wrecked and in the ditch near Cordell. The thief escaped.

Tulsa May Have Negro Hospital if tentative plans now under consideration mature. It is said the need accentuated by riot conditions is the moving factor making the hospital possible.

Dr. L. H. Ritzhaupt, Guthrie, is attending the Rochester Clinics, after completion of his stay he will visit relatives in Wisconsin, bringing Mrs. Ritzhaupt home from Eau Claire, where she spent the summer.

Dr. J. T. Martin, Oklahoma City, after a strenuous time surgically, with himself occupying the stellar role, is back on the job and once more Oklahoma City will have the best as to sanitary direction and execution.

Dr. T. A. Buchanan, Oklahoma City, suffered an unusual accident when some cigarette smoker in an office above the doctor's parked automobile used the car for a garbage can. The resulting fire damaged the car to the extent of \$250.00.

Dr. G. A. Waters, Granite, who has been holding forth as director of all things official at the State Reformatory, has done such a good job of it that his friends are boosting him for the Democratic nomination for Governor according to press dispatches.

Dr. William C. Barton, formerly of Devil's Lake, North Dakota, and connected with the Medical Department U. S. Indian Service has moved to Anadarko and is attached to the Kiowa Indian Agency. Dr. Barton lost no time in transferring his membership to Oklahoma.

Whipping Posts For Reckless speedsters who wantonly injure human beings is urged by Dr. G. E. Hartshorne, Tulsa, who included the fool drunk and similar irresponsibles. The doctor cites the well known fact that those people who do have such salutary means of punishment have a citizenship holding the laws demands in high respect.

Dr. J. Winter Brown, Tulsa, addressing the Civitan club of that city recently, presented convincing argument setting forth the need for a Maternity Hospital for Tulsa. Dr. Brown especially noted the unnecessary loss of life, of mother and child, which could be reduced to the low minimum by proper care such as a maternity hospital would provide.

Dr. Walter Hardy, Ardmore, seems to have found one situation where the aeroplane proved its worth. Called to an emergency where several employees of a gas concern had been overcome by gas, the distance, 32 miles was covered in 20 minutes. Prompt measures including use of oxygen and other appliances which are carried on the car, saved the lives of five of the six men, poisoned, one died.

Mecklenburg County, N. C., which includes Charlotte, is said not to have one doctor residing in the county outside the cities and towns. The dispatch also notes that Massachusetts has four counties which have not a single doctor. The unusual state is accounted for by the fact that the doctor now may cover his former territory in a fraction of the time, good roads and automobiles making it possible.

Dr. Earl D. McBride, Oklahoma City, lucky selection to represent his Rotary Club at the International Convention of Rotary, Edinburgh, June 10-15 has returned after several weeks absence, during which time he also visited many points of interest in Continental Europe, including Antwerp, Brussels, Paris, Vienna and Munich. A brief account of his trip appeared in the August issue of the Journal.

The Oklahoma City News, editorially writes Dr. J. T. Martin the following note.

#### TO CITY PHYSICIAN MARTIN

Dear Doctor: What, in your opinion, is the cause of the odorous atmospheric condition in the section of University hospital, from Park Place north to 13th street? Casual visitors to that district hurriedly seek a different air. Have the customary activities of our downtown sewers been transferred to that vicinity?

Hospitals of Oklahoma have, for the first time, been accurately surveyed and listed, according to report of the Council on Medical Education and Hospitals, of the American Medical Association just issued by that body. The State has 1,262 square miles per hospital, 980 population per hospital, 58 per cent. of the beds are occupied while we have 65 counties without any hospital facilities whatever. Oklahoma City with 91,258 population has 606 beds; Tulsa with population of 72,075 has 176, Muskogee with population of 30,277 has 170.

City Physicians heretofore sending cases to the University or any other hospital without prior authority from the county commissioners, it is said, have exceeded their legal rights and powers in so doing. The matter was brought before the Attorney General's office, who gave the commissioners of Oklahoma county the opinion that:

"The statutes state that the county commissioners shall be overseers of the poor, and it is the opinion of this office that neither the city physician nor the county physician has power to incur hospital expenses to be paid for by the county. It is the duty solely of the commissioners to take care of the poor".

"Acute Osteomielitis" is the title given a "new disease" appearing in Marshall, Logan County. "Very rapid in its work" says the newspaper, "like appendicitis, this disease requires prompt medical and surgical attention if the victim is to escape with the least amount of suffering." At that the advice is good and to the point, that country editor gets at the meat of the coconut, something we have seen members of our honored profession fail of appreciation. So we will forgive him his little bull as to spelling.

#### THE TRUTH ABOUT IODINOL

As the medical profession of the Southwest has recently been circularized extensively anent the virtues of Iodinol, the Journal offered its matter for the advertising pages, an investigation of the product was requested by the Council, on Pharmacy and Chemistry, A. M. A., which body advised that it had not been examined by them as the product had never been submitted. However, their reports of August 25th contained the following matter which is deemed of sufficient interest to reproduce, which publicity may forewarn some physician in the future. Ed.

Iodinol, an "Intensified Iodin" at an intensified price. The A. M. A. Chemical Laboratory reports that Iodinol is put out by the Toledo Pharmacal Co. (price to physicians one dollar a pint) with the statement that it is "a water solution of organic iodine containing one grain of the element in each fluid drachm". It is referred to as "intensified iodine"—whatever that may mean—but no information is offered concerning the nature of the "organic iodine" compound in Iodinol. The Laboratory found that the iodine in Iodinol was present as iodide or in a form which really yields iodide, and the preparation cannot be considered as being an "organic iodine" preparation, either from the chemical or therapeutic point of view. Instead, it appears to be an iodo-tannic preparation,

probably similar to the iodo-tannic syrup of the French Pharmacopeia. While a correspondent claimed that Iodinol was a relatively cheap way to dispense iodine for internal use, it has no advantage over a simple solution of potassium iodide or sodium iodide, and is about fourteen times more expensive. Iodinol is to be condemned because it is secret in composition and is sold under exaggerated, unwarranted and untruthful claims (Jour. A. M. A., Aug. 20 1921, p. 637).

#### NEW MEMBERS

Since publication of the June Roster the following names have been placed in good standing as members of the Oklahoma State Medical Association:

##### BECKHAM COUNTY

Johnson, T. E. .... Elk City  
Rone, K. R. .... Elk City

##### BRYAN COUNTY

Rutherford, J. P. .... Clarita

##### CADDO COUNTY

Barton, Wm. C. .... Anadarko

##### COTTON COUNTY

Dice, R. J. .... Randlett  
Holsted, A. B. .... Hastings  
House, C. F.\* .... Hastings

\*Error—should have appeared in June Roster.

##### GARFIELD COUNTY

Fletcher, Michael A. .... Hunter

##### GARVIN COUNTY

Johnson, W. P. .... Stratford

##### GRADY COUNTY

Moore, J. W. .... Pocasset

##### KINGFISHER COUNTY

Waters, C. R. .... Cashion

##### LATIMER COUNTY

Morrison, C. R. .... Curve, Tennessee

##### McINTOSH COUNTY

McColloch ..... Checotah

##### NOBLE COUNTY

All the names listed as in Noble County should have appeared in the June Roster.

Bradford, S. F. .... Billings  
Cavitt, R. A. .... Morrison  
Coldiron, D. F. .... Perry  
Dorough, John L. .... Perry  
Goins, S. H. .... Lucine  
Kuntz, Lamburtus ..... Perry  
McQuikown, Harry ..... Red Rock  
Owens, B. A. .... Perry  
Renfrow, T. F. .... Billings

##### OKLAHOMA COUNTY

Williams, C. W. .... Houston, Tex., Base Hosp. No. 25.  
..... U. S. P. H. S.  
Wood, Ira J., ..... Jones

##### OKMULGEE COUNTY

Stanley, Mont. V. .... Okmulgee  
Stark, W. W., ..... Okmulgee

##### OSAGE COUNTY

Alexander, Everett, ..... Bigheart

##### PAWNEE COUNTY

Beitman, C. E. .... Skedee

##### STEPHENS COUNTY

Hancock, A. R. .... Duncan  
Verdier, Richard A. .... Duncan

##### TULSA COUNTY

Butler, Garvin H. .... Tulsa, 502 South Boulder  
Gillepie, C. M. .... Tulsa, 311 Richards Bldg.  
Miller, Geo. H. .... Tulsa, 104 Unity Bldg.  
Smith, D. O. .... Tulsa, 604 South Cincinnati  
Turrl, Vernon Le Verne. .... Tulsa, 312 Bliss Bldg.  
Wright, John W. .... Collinsville

##### WOODS COUNTY

Rogers, C. L. .... Alva  
Smedley, Wm. H. .... Capron

C. A. Thompson, Secretary-Treasurer.



### *Abstracts, Observations from Current Medical Literature*

#### CONDUCTED BY

RADIOLOGY AND DERMATOLOGY—Dr. Chas. H. Ball, Daniels Bldg., Tulsa.

GENERAL SURGERY—Dr. M. E. Stout, Patterson Bldg., Oklahoma City.

ORTHOPAEDICS—Dr. Earl D. McBride, 208 Colcord Bldg., Oklahoma City.

EYE, EAR, NOSE AND THROAT—Dr. L. C. Kuyrkendall, McAlester.

GENERAL—INDUSTRIAL MEDICINE—PUBLIC HEALTH—Dr. L. A. Mitchell, Frederick; Dr. J. L. Austin, Durant.

### "DIAGNOSTIC VALUE OF BLOOD CHEMISTRY"

Answers to question propounded to Dr. Wm. H. Bailey, Oklahoma City, anent his paper on the "*Diagnostic Value of Blood Chemistry*".

#### QUESTIONS

(1). Will examination of the blood for N-P-N and of the urine for the out-put of P-S-P differentiate cardiac from renal cases early in the disease?

(2). Does blood chemistry examination give an earlier indication of disease of the kidney in chronic interstitial nephritis than the specific gravity test?

(3). What is the Mosenthal test meal for renal function?

#### ANSWERS

No single kidney function test will give us an indication of the whole picture of renal efficiency. The tests are not duplicates the same as are the several tests for albumen in the urine. Each of them has its particular sphere in which it is of more value than the others. Also in certain conditions one test will give us more information than others also more than it will itself give us in other conditions. At all times the results of any one or more of these tests must only be considered in conjunction with the other clinical symptoms in the case. Never can an interpretation or deduction as to the functional ability of the kidney or as to the prognosis of a case be given from these tests alone.

Non-protein Nitrogen in the blood is dependent on three main factors; first, protein intake; second, protein destruction; third, kidney efficiency. The first can be regulated by the diet, the second can be estimated roughly by fever, loss in weight etc., and the third by the quantity of Non-protein Nitrogen retained in the blood.

The Phenolsulphonephthalein test (hereafter indicated as P-S-P test) only indicates the ability of the kidneys to excrete the phthalein dye. It does not indicate what substances the kidney is unable to eliminate and therefore are piling up in the system.

Cardiac-vascular hypertension cases without renal involvement, usually have a relatively high or nearly normal P-S-P as well as none or very little increase in the N-P-N (Non-protein Nitrogen) in the blood. These factors should assist in differentiating cardiac from renal conditions in early cases as well as at any stage, until kidney involvement is also present.

The specific gravity fixation test usually gives the first indication of disease in chronic interstitial nephritis. The test not only gives the first indication of kidney involvement but is the first to reach the maxim degree. For this reason the patient may live many months after the fixation specific gravity test shows him to be in a very grave condition. Therefore we must not depend upon one test alone to show up the whole picture. The P-S-P test is probably the better with which to check up the progressive development of a renal condition.

The Mosenthal test meal for renal function, as stated in most references is a well balanced full diet, containing approximately 13.4 grammes Nitrogen, 8.5 grammes salt (given as three capsules if necessary) and 1760 CC of fluid. No fluid or other food to be taken except at meal time. Urine is collected every two hours from 8 A. M. to 8 P. M. and a 10-12 hour specimen at night. The maximum specific gravity of the several separate specimens should be 1.018 or more and a variation of 9 points or more from highest to lowest specific gravity. Night urine should be 400 CC or less in quantity and of 1.018 or more specific gravity. The quantity of Total Nitrogen, Sodium Chloride or other ingredients may be determined on each specimen, but these do not add greatly to the value of the test. The three main factors which indicate diminished function are, lowered maximum specific gravity, fixation of specific gravity and nocturnal polyuria.

No single test or even several of the tests can be used to show the type of kidney disease present or to indicate what line of treatment is to be followed, these factors must be determined by the other data available.

Taken a case of nephritis at a certain stage, in which the three tests are made. The N-P-N, Urea Nitrogen and creatinine in the blood would probably indicate the least impairment, the P-S-P next and the test meal for renal function the greatest. Therefore the blood chemistry tests are probably of more valuable in indicating the dangerous conditions of the kidney as they reach their maximum degree late in the course. Of the three determinations in the blood, the Creatinine is usually the last to be retained by the kidney and is the most valuable factor in estimating the prognosis of a case.

## THE IMPORTANCE OF EARLY DIAGNOSIS IN ACUTE ABDOMINAL CONDITIONS

J. Louis Ransohoff, Cincinnati.  
(*Southern Medical Journal*, April 1921.)

Regarding the subject he says that men are still to be found in every community, who either through ignorance or carelessness fail to accept the modern teaching, stating that we acknowledge that in diphtheria or even suspected diphtheria, the administration of antitoxin means the saving of life and the man who refuses to give it commits a crime against medicine and a greater crime against humanity and says he feels that a man who allows a frank appendicitis to rupture before operating, commits the same crime.

He says unfortunately we have no courtmartial to fall back on in civil practice and that our medical ethics almost force us to protect the doctor who waits with his acute abdominal cases until a general peritonitis has occurred.

From the standpoint of emergencies he gives the acute appendicitis, perforated gastric and duodenal ulcer and states that an emergency operation on the gall bladder is only necessary in acute gangrene or rupture, but says that once the diagnosis of appendicitis is made, immediate operation is imperative. And in discussing the symptoms he says that pain, tenderness and rigidity are the only three symptoms worth while and calls attention to the fact that the tenderness is not always over Mc. Burney's point on account of the variation in its location, citing the retrocecal appendix as an example.

He points out the difficulty of making a diagnosis in children and states that operation must not be delayed as they bear purulent conditions very badly. He also calls attention to the difficulty and importance of ruling out acute lobar pneumonia.

He says that in rare causes, such as internal hernia, it is sufficient to make a diagnosis of obstruction and let the exact cause be determined at the table and he calls attention to the severity of the symptoms produced by hemorrhagic pancreatitis, perforating gastric and duodenal ulcers and insists that every hour counts in the patient's life, saying that we must educate the general practitioners and intereneest that these conditions are primarily surgical.

M. E. Stout, Oklahoma City.

## EPITHELIOMA OF THE LIP

C. F. Nassau.  
(*Surgical Clinic of North America*, Feb. 1921)

The author states that Epithelioma of the lip is the most common malignant growth occurring on the face and that it causes more than 2% of all cancer deaths, that it occurs about 17 to 19 times more frequently on the lower than upper lip and that its relative frequency as to sex is 49 in the male to 1 in the female.

He states that a family history of malignancy plays a negligible part in its etiology; but that a common antecedent history is the presence of a cracked, fissured, or chapped lip which does not heal and mentions as causes, cold sores, patches of leukoplakia seborrheic patches, small warty growths or slight trauma from jagged tooth etc, which break the protective epithelium and later become indurated, thickened and sooner or later develop an ulcer. He speaks of these as being well defined precancerous conditions and insists that they should all be subjected to early radical treatment since the stage of transition into active malignancy is not easily recognized by clinical signs. He remarks that X-ray and Radium is often curative in these precancerous conditions, but advises radical removal together with the entire gland bearing area in the active cancer conditions, stating that the successful treatment of this curable form of cancer depends on two things—1. The earliness with which the lesion is detected. 2. The thoroughness with which it is removed.

M. E. Stout, Oklahoma City.

## ECTOPIC TESTICLE PERINEAL VARIETY, OPERATION AND IMPLANTATION OF TESTICLE IN THE SCROTUM

John H. Jopson, Philadelphia.  
(*Surgical Clinic of North America*, Feb. 1921.)

Patient a well developed boy of eight, presented a condition of abnormal descent of right testicle since birth. Testicle of normal size lay in perineum and was freely movable. After calling attention to the three different forms of Ectopic Testicle, the Perineal, the Crural and the Pubopenile in addition to the arrest in the normal route from the abdomen, he states that any abnormal descent or migration of the testicle may be a source of possible danger from further atrophy or malignancy and advises replacement of the testicle in the scrotum before puberty as giving the best chance possible for development. He says that from six to twelve is the best age for operation and advises the Bexon technique with such modifications as the individual case may demand, but he emphasizes the point that it is poor policy to divide the spermatic vessels and cut down the blood supply to the organ which we wish to develop.

M. E. Stout, Oklahoma City.

## THREE FREQUENT CAUSES OF WEAK AND OF FLAT FEET.

Torrence J. Rugh M. D., Philadelphia.  
(*Annals of Surgery*, April 1921.)

1. Shortened heel cord. Shaffer was first to call attention to this condition. Careful examination of 50,000 soldiers showed that about 12 percent possessed heel tendons which would not permit of dorsiflexion of the foot to or beyond a right angle when the foot was held straight or slightly abducted and the knee straight. In examination of nurses entering training in a large hospital, about 30 percent were affected in the same manner.

The mechanics of its ill effects are due to the downward and backward slope of the os calcis and the attachment of the tendon to the middle and lower portion of the posterior end. Also in the normal foot, the os calcis points slightly outward from the centre of the ankle-joint producing a normal tendency to slight abduction. When the tendo-achillis is shortened, tension is thrown upon it in walking, and, as most people walk with the foot everted, an outward rotation takes place which naturally places more body weight and strain on the inner side of the foot. Mechanical strain from disturbed balance is the inevitable result.

In treatment of this condition operation is recommended if the patient is under 35. The tendon is lengthened subcutaneously by partial section at different levels and thorough stretching. Over 35 mechanical treatment is preferable. The heel of the shoe is raised or a pad is inserted inside the shoe under the foot-heel. Frequently the inner edge of the heel and sole may be wedged to throw the body weight directly over the centre of the foot.

2. Hypertrophy of the inner end of the scaphoid bone. Because of its relation with the inner surface of the head and neck of the astragalus, prolongation of the scaphoid inward causes mechanical obstruction to adduction of the forepart of the foot. This gives a mechanical disadvantage to the pull of the posterior tibial tendon permitting a slight degree of abduction, thus throwing strain upon inner border of the foot. Muscle spasms then sets in and the pull of the peronei becomes a very important and potent factor in increasing the faulty posture.

3. A supernumerary tarsal bone is sometimes found at the inner side of the scaphoid and over which runs the tendon of the tibialis posticus. It is called the tibiale externum or sesamoid in the posterior tibial tendon. When this structure is present and there is marked abduction of the front portion of the foot with prominence and convexity on the inner side of the foot in front of and below the internal malleolus, the best procedure is to remove the supernumerary bone and the inner end of the scaphoid



and make a reattachment of the tendon of the tibialis posticus further forward on the scapoid or even to the internal cuneiform. The foot is held in plaster cast ten to twelve weeks.

Earl D. McBride, M. D., Oklahoma City.

## RECURRENT DISLOCATION OF THE SHOULDER JOINT

James Warren Sever, M. D., Boston.

(*Jour. A. M. A. Vol. 76 No. 14, April 2nd., 1921*)

Of all the operative procedures which have been advocated in the treatment of this complication, none so far as he could determine has considered the muscular mechanics of the joint or the effects of muscular contraction as a factor in producing recurring dislocations. The muscles in relation to the shoulder joint are the coracobrachialis triceps, deltoid, super-spinatus, infra-spinatus, sub-scapula, rhomboids and latissimus-dorsi. The shoulder owes its stability to its muscular capsule formed by these muscles and not to the ligamentous capsule. When injury has taken place these muscles atrophy. The only point of the joint capsule left unguarded by muscular insertions is that between the insertion of the triceps on the lower edge of the glenoid fossa and the sub-scapularis above. This is the portion of the capsule which is supposed to be most frequently torn in these dislocations. The pectoralis-major, especially the lower portion is the one muscle which pulls the head of the humerus forward when the arm is abducted and elevated, the one position in which dislocation almost invariably occurs. This force combined with a lax sub-scapularis must result in an anterior dislocation in this type of case. He points out that anterior dislocations are not infrequently seen in cases of obstetric paralysis in which the sub-scapular muscle is paralyzed and the pectoralis major contracted. Complete division of the pectoralis major without subsequent suture and plecting of the capsule, but especially shortening of the sub-scapular tendon without division, are the two essentials for successful operation. The deltoid and coracobrachialis will hold the head of the humerus in place if given a chance; and by removing the pull of the stronger pectoralis major and taking up the slack in the stretched sub-scapularis one can be assured of a permanent cure. Repair of other torn or stretched tendons, such as the supra-spinatus and infra-spinatus may also be done but are not as necessary. Capsulorrhaphy may also be performed but it is not an essential to success. He has done a complete division of the pectoralis major in about forty cases with no untoward results. The arm can be abducted as well as before, and no loss of function has been observed.

## CONGENITAL TORTICOLLIS.

H. W. Meyerding M. D. F. A. C. S.

(*American Jour. of Ortho. Surgery, March 1921 Vol. XIX No. 3.*)

Torticollis of congenital origin is a deformity rarely met with in general practice of medicine and surgery. There were only 26 out of 212,000 patients examined in 8 years at the Mayo Clinic. He makes his study because the rarity, lack of, or inadequacy of the previous treatment in advanced cases seems to warrant it.

The treatment is surgical, not manipulative. His technique in operation is: incision just above and parallel with the clavicle at the sternal end is made through the skin and platysma myoides muscle and superficial fascia. Blunt retractors expose the contracted muscle which is dissected free from surrounding structures by blunt dissecting scissors and divided. All contracted tissue is also divided. Usually division of the superficial fascia, platysma, and portion of the deep fascia is sufficient, and with good exposure there is little danger of injury to the jugular vein, pneumogastric nerve, and carotid artery. When the operation is finished there should be little or no resistance to overcorrection. A few deep sutures are taken to eliminate dead space and the wound closed, dressed with a pad of gauze and cotton, and a plaster cast applied to

maintain overcorrection. If scoliosis has resulted from long standing postural deformity the patient is placed in extension the day before operation and a cast applied from the pelvis to the axilla. This allows greater ease in fixing the head and shoulders when the patient is under anesthesia and permits of the correction of the curvature in most instances. When fixation is complete the shoulder on the affected side should be held down firmly with the chin pointing toward it and the head forced well over in the opposite direction.

The length of time in the cast is from one to three months according to severity of the case. Patients are instructed to exercise before the mirror after cast is removed. A bag of shot carried in the hand of the affected side is of value. Cases that are not of long standing may simply require stretching after operation.

The age of some of the patients and the lack of previous treatment prevented some from assuming a complete normal poise and balance after operation. Facial deformity is also likely to remain in the older patients, but will clear up in children.

Earl D. McBride, M. D., Oklahoma City

## MISCELLANEOUS

### BRANCHIAL CYSTS AND FISTULAS

Three cases are reported by P. K. Gilman, San Francisco (*Journal A. M. A., July 2, 1921*), a right branchial cleft fistula, incomplete external type; a cyst of right branchial cleft, and a right branchial cleft fistula, incomplete external type. In each case a successful operation was performed.

### THAT HOUSTON HOSPITAL.

As we read the congressional report of the Houston hospital for ex-service men, how it is a model institution thoroughly approved by the government investigators, we are irresistibly reminded of the Tulsa gentlemen who on a day when it was thought desirable to force Oklahoma into establishing a two-million-dollar hospital declared the Houston institution to be a cesspool wherein Oklahoma ex-service men were being tortured to death.

The World promised then the facts would sooner or later be set forth. It stated then that it was monstrous to believe that a sister state was any less effective in its hospitalization affairs than Oklahoma would be if charged with such responsibility.

Truth is frequently a fugitive thing, but always it establishes its supremacy over falsehood, intrigue and mercenary misrepresentation sooner or later.

Tulsa World.

### MELANO-EPITHELIOMA OF PALATE

Only twenty-four instances of primary melano-epithelioma of the palate were found in the literature by Gordon B. New and French K. Hansel, Rochester, Minn. (*Journal A. M. A., July 2, 1921*). One case at the Mayo Clinic, which was observed in 163 cases of melano-epithelioma of the body in general and thirty-two primary epitheliomas of the palate, makes a total of twenty-five cases. The patient was a man, aged 62, who had a tumor about 1 cm. in diameter of the right side of the palate which he had noticed one month before by feeling it with his tongue. The tumor had grown very rapidly. A piece of the growth was removed by the patient's home physician, and microscopic examination revealed melanosisarcoma. The patient had not worn dental plates, and there was no history of trauma or pigmentation on the palate. The tumor had bled slightly on several occasions. A slight defect in speech was the only symptom manifest. The tumor was cauterized thoroughly with soldering irons, and twelve days later 5 gm. of radium was applied to the open wound for ten hours with no screening except the radium container, less than one mm. in thickness. Eleven months afterward there was a recurring growth on the palate.



### A CLINICAL MEETING WITH AN ALL-STAR CAST.

An attractive innovation in medical meetings has been undertaken by the Mississippi Valley Medical Association, to be held in St. Louis on October 13, 14 and 15. For this occasion a most unusual program, entirely free from the ordinary trite and formal medical paper reading, has been arranged.

Program participants have been carefully selected from eminent specialists among the leading authorities in the various fields of medicine. The preliminary announcements contain such names as Dr. Llewellys F. Barker, of Baltimore; Dr. Anthony Bassler, of New York; Dr. Chas. H. Frazier, of Philadelphia; Dr. John de J. Pemberton, of Rochester, Minn.; Dr. Isaac Abt, of Chicago; Dr. C. Jefferson Miller, of New Orleans, and others of equal prominence. These noted clinicians have accepted invitations to give scientific addresses (not papers) consisting of clinical demonstrations and discussions upon borderline subjects pertaining to their particular specialties. Because of their clinical bearing and wide medical scope, the subjects chosen will undoubtedly be of more interest to the general practitioner than to the specialist.

The third day of the program will be given over to the clinics in the various St. Louis hospitals and universities, at which the guests of this Society as well as St. Louis physicians will participate.

The date of this meeting coincides with the Centennial Celebration and Pageant of St. Louis, which event will no doubt afford additional means for entertainment and social enjoyment to those attending this meeting. Dr. William Engelbach, University Club Bldg., St. Louis, is chairman of the committee of Arrangements and will gladly answer inquiries requesting further information.

### THE MODERN METHOD OF FEEDING INFANTS

Modern infant feeding calls for a formula suited to the individual requirements of the individual baby. The physician now realizes that an infant deprived of breast milk must be fed as an individual. The nourishment from the infant's food is principally derived from cow's milk. The "foods" contain no mysterious life-giving elements but are used as modifiers. As such they are indispensable for their carbohydrate content, the added carbohydrate being necessary to make up for the loss of carbohydrate when cow's milk is diluted with water. It is also important that these "foods" are given as carbohydrates and should not contain a mixture of vegetable protein and fat, since the cow's milk supplies animal protein and fat in proportion suitable for the growth of most babies.

Infant feeding should be directly under the control of the physician. Realizing this important fact, Mead Johnson & Company of Evansville, Indiana, have manufactured a line of Infant Diet Materials suitable for the individual requirements of the individual baby. These products do not carry laity directions on the trade packages. Such directions on a package of food is the unsurmountable wall that differentiates between individual infant feeding and indiscriminate infant feeding. The physician may prescribe Mead's products with perfect confidence.

Mead's line of Infant Diet Materials consist of Mead's Dextri-Maltose (Dextrins and Maltose), Barley Flour, Dry Malt Soup Stock, Casec (Calcium Caseinate—for preparing Protein Milk), Arrowroot Flour and Cereals, all of which are prepared without any directions on the packages. Over and beyond the gratifying results obtained from Mead's products, the physician is given unlimited scope to his own creative talents, hence there will be a greater number of better babies in his immediate neighborhood. The mother who uses Mead's Diet Materials at the direction of her physician is disposed to place credit for the welfare of her baby where credit belongs, i. e., to the doctor. The Mead Johnson policy means the realization of an ethical ideal.

Interesting publications on Infant Feeding, prepared by Mead Johnson Company are well worth writing for. Letters addressed to them will receive personal attention from their Scientific Department.

### A Handy Little Reference Book for the Busy Doctor

Parke, Davis & Company recently issued a little reference book on Adrenalin that should be in the hands of every practitioner of medicine. It is an excellent desk companion, most conveniently arranged for ready consultation.

In glancing through the pamphlet the reader is impressed by the fact that, after twenty years or thereabouts, Adrenalin occupies a position of importance in therapeutics second to that of no other medicinal agent. In other words, it is now recognized as a standard and indispensable preparation, notable especially for its efficiency in vasomotor disturbances, shock and collapse, hemorrhage, asthma, as an adjuvant in local anesthesia, and in the field of endocrinology. No less impressive is the great array of preparations of Adrenalin or preparations of which Adrenalin constitutes the principal ingredient.

Thus we have available pure Adrenalin in crystals and in tablet form, and Adrenalin Chloride in solutions of 1:1000, 1:2600 and 1:10,000 in hermetically sealed glass ampoules, exceedingly convenient for emergency use. The 1:1000 solution is also supplied in ounce bottles. Adrenalin Inhalant is nicely adapted for use in a nebulizer in the treatment of nasal and pharyngeal affections. Then we find Adrenalin Suppositories and Adrenalin Compound Suppositories for the treatment of rectal inflammatory affections, hemorrhoids, etc. The uses of Adrenalin Ointment, Adrenalin and Chlorotone Ointment, and Apthesine Ointment suggests themselves in the control of inflammations of mucous membranes. This list of local anesthetic combinations includes Tablets of Adrenalin and Cocaine, Apthesine and Adrenalin, Apthesine Solution, Codrenin, and Locosthetic, the latter two being aqueous solutions designed particularly for the use of dentists.

It should be said in all fairness that Adrenalin is the original natural preparation of the active principle of the suprarenal gland. It is a vastly better product than any synthetic compound, and under the present highly perfected process of manufacture it is a stable and dependable preparation of uniform strength. In specifying the original Adrenalin the physician assures himself that his results in its use will not disappoint him. We suggest that our readers send for this little book, "Adrenalin in Medicine."

### Legal Liability for Transmitting Infection

Washington, June. . . Personal responsibility for the transmission of venereal disease has now been upheld in several different phases in both civil and criminal courts, says the U. S. Public Health Service. In Oklahoma a man has been sentenced to five years in the penitentiary for infecting a girl with syphilis. In Nebraska the court upheld a doctor who warned a hotel keeper that one of his patients, a guest of the hotel, had syphilis and had refused treatment and was consequently a menace to the public health. In North Carolina a woman has been awarded \$10,000 damages against her husband for a similar infection and the Supreme court has upheld the judgment.

The Nebraska case is important because it asserts that a physician's duty to protect the public health may, under certain circumstances, transcend his duty to hold his patient's confidence inviolable. The North Carolina case is also important because it sets aside in this particular case the legal barrier that prevents a wife from testifying against her husband and bringing suit against him.

All three cases are valuable in counteracting incorrect statements, often made, that the venereal-disease law falls almost exclusively on women and lets men go free. State law of course govern in all such cases but the fact that every State in the Union has now adopted many if not all of the venereal-disease laws, gives ground for expecting similar action in other States. Certainly the wide dissemination

of the three decisions should go far to curb diseased persons who deliberately expose others to infection.

Curiously enough the District of Columbia is the only part of continental United States that has no venereal disease laws. Congress, which makes the laws for the District, has not yet acted.

The fact that the North Carolina decision makes it likely that marriage will henceforth be no adequate defense against a suit for transmitting infection will probably hasten the adoption by the States of laws requiring every applicant for a marriage license to present a certificate by a reputable doctor certifying that he is free from venereal disease and providing that without this no license shall be issued.

Twenty States have already adopted laws forbidding persons with venereal disease to marry, seven of these—New Hampshire, New Jersey, North Carolina, Oregon, Washington and West Virginia—having acted during the present year's sessions. A similar bill is now pending in Florida.

All of the twenty States do not require medical examination and certification that the applicant is free from venereal disease. "Such a certificate should be required in every State," insists the Public Health Service. "Any decent man with an uncured infection who marries does so either because he does not realize the seriousness of his action or because he believes that he is cured. The necessity for an examination should bring its seriousness home to him and should be welcomed by him as a protection for his wife and children. No real man should object to a medical examination required by law.

## NEW BOOKS

### THE SURGICAL CLINICS OF NORTH AMERICA

(Boston Number, June 1921)

The Surgical Clinics of North America (Issued Serially, one number every other month). Volume I Number 3 By Boston Surgeons. 345 pages, with 159 illustrations. Per clinic year (February 1921 to December 1921). Paper \$12.00 net; cloth \$16.00 net. Philadelphia and London: W. B. Saunders Company.

This issue of the Clinics is devoted to Boston. Drs. Edward H. Nichols, Boston City Hospital presents "Head Injuries", which he divides into five sub-divisions; Dr. William P. Graves, "Radium in the Treatment of Cervical Cancer, in Metrorrhagia of the Young", and others. Dr. Robert B. Osgood, "Tuberculosis of the Knee-Joint", Dr. Lincoln Davis, "The Surgical Treatment of Carcinoma of the Cervix Uteri", Dr. David Cheever, "Tuberculosis of the Mammary Gland", "Peptic Ulcer" and "Gastric Neuroses", Dr. Frederick J. Cotton presents "A Reconstruction Clinic", dealing with old injuries and repair of injuries to the Knees, Recurrent Shoulder Luxation, Sterno-Clavicular Luxation, Arthroplasties of the elbows, knee, ankle etc., "Old Tarsal Fracture, Compound Fracture both legs" "Pseudarthroses, Bone Grafts, Malunion from Fracture of the Forearm," "Compound Fracture of Humerus, with Osteomyelitis and large Sequestrum", "Fracture of the Jaw with Deformity," "Ulnar Nerve Suture", "Neuromata of Stump", with Excision and Alcohol Injections as after treatment. "Scar Excision", "Tuberculosis of Palmar Tendon Sheaths", "Tuberculosis of Tarsus", "Cancer of Floor of the Mouth", "Hemolytic Jaundice, with Splenectomy and Recovery", "Ulcer of the Stomach", "Undescended Testes", "Compound Gunshot Wound of Hip" with many others, the whole presenting a wide range of cases with Dr. Cotton's idea of their care. The issue contains many other features equally attractive, but space prohibits their inclusion. The subjects above presented give the reader an idea of the prolific character of the issue sufficient to attest its high worth.

### THE SURGICAL CLINICS OF NORTH AMERICA

(New York Number, April 1921)

The Surgical Clinics of North America (Issued serially, one number every other month) Volume I Number 2. By New York Surgeons. 326 pages, with 116 illustrations. Per Clinic year (February 1921 to December 1921). Paper \$12.00 net; cloth \$16.00 net. Philadelphia and London: W. B. Saunders Company.

The New York presents an imposing array of talent not to be excelled, rarely equalled, Dr. Fred H. Albee presents "Plastic Surgery of the Hip and Femur", Dr. John F. Erdman, "Exophthalmic Goiter", "Cystic Adenoma of Ovary", "Duodenal Ulcer", "Chronic Suppurative Mastitis" and Chronic Cholecystitis", Dr. John A. Hartwell, "Suture of Musculo Spiral Nerve", "Chronic Osteomyelitis", "Acute Empyema", "Cancer of the Rectum", "Non-Tuberculous Inflammation of the Cecum" and "Chronic Gastric Ulcer", Dr. Chas. Gordon Heyd, "Duodenal Ulcer", "Chronic Appendicitis", "Cholelithia-Operation", operations for "Acute Perforative and Simple Appendicitis", Dr. Byron Stokey, "Brachial Plexus Injuries". Many other clinical reports are included. All are beautifully illustrated and reflect the ability of New York's profession.

### GENERAL PATHOLOGY

An Introduction to the Study of Medicine, Being a Discussion of the Development and Nature of Processes of Disease By Horst Oertel, Strathcona professor of Pathology and Director of the Pathological Museum and Laboratories of the McGill University and of the Royal Victoria Hospital, Montreal, Canada. Cloth, 356 pages, illustrated, Price \$5.00, Paul B. Hoeber, New York, 1921.

In this work Oertel does that which few writers have done, by sheer brightness and attractive style, he holds the reader on objects often hard to grip the readers interest by reason of their dryness. Almost devoid of illustrations, the work adheres to its claim of being a discussion of the development and nature of processes of disease, and shortly after one opens its pages he concludes that the text alone is of sufficient attractiveness to render bolstering illustrations, not only unnecessary, but a waste of space wherein every bit of space is precious. Few authors have that great gift of ability to transmit their thoughts to others in such entertaining vein as will leave the reader regretting that the end of the volume has been reached. The description of the dryest, most uninteresting matter is so written that one admires the fine command of language making such presentation possible. The book will be found to be a much consulted addition to any library, and the reader will realize that for once his time has been more than well expended in perusal of the pages.

### HYDROTHERAPY

An Epitome of Hydrotherapy, for Physicians, Architects and Nurses. By Simon Baruch, M. D., L.L. D., Consulting Physician to Knickerbocker and Montefiori Hospitals, Consulting Hydrotherapeutist to Bellevue Hospital, New York City, Formerly Professor of Hydrotherapy, College of Physicians and Surgeons, Columbia University. 12 mo of 205 pages, illustrated. Philadelphia and London: 1920. W. B. Saunders Company, Cloth, \$2.00 net

### A TEXT-BOOK OF PHYSIOLOGY

A Text-book of Physiology, for Students and Practitioners of Medicine, by Russell Burton-Opitz, M. D., Ph. D., Associate Professor of Physiology, Columbia University, New York City. Octavo Volume of 1185 pages with 538 illustrations. Philadelphia and London: W. B. Saunders Company, 1920. Cloth, \$7.50 net.

### MILK

Milk by Paul G. Hemman, Ph. D. Director of the Laboratories of the United States Standard Serum Company, Woodworth, Wisconsin. Octavo of 684 pages with 237 illustrations. Philadelphia and London: W. B. Saunders Company, 1919. Cloth \$6.00 net.



**DIAGNOSTIC AND THERAPEUTIC TECHNIC**

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Diagnostic and Therapeutic Technic. A Manual of Practical Procedures Employed in Diagnosis and Treatment. By Albert S. Morrow, M. D., Late Lieut.-Colonel, M. C., U. S. A., Attending Surgeon to the City Hospital; and to St. Bartholomew's Hospital, New York City, Consulting Surgeon to the Nassau Hospital, Mineola, L. I. Third Edition, Entirely Reset, Octavo of 894 pages, with 892 illustrations, mostly original. Philadelphia and London: 1921. Cloth, \$8.00 net.

**TOUSEY'S MEDICAL ELECTRICITY, X-RAYS AND RADIUM**

(New, 3rd. Edition)

With A Practical Chapter on Phototherapy, By Sinclair Tousey, A. M., M. D., Consulting physician to St. Bartholomew's Clinic, New York City; Price \$10.00 net, Pp. 1337, with 876 illustrations: Philadelphia. W. B. Saunders Company 1921.

The author takes up this work in splendid style. He brings out many additions to his subject derived from the World War. Chapters dealing with radiography, position and exposure technique, roentgen ray and radium therapy also high frequency currents are excellently prepared.

Dermatologists and Roentgenologists, as well as general practitioners will find this an excellent treatise on the subject.

S. D. Neeley

**TREATISE ON FRACTURES**

In General, Industrial and Military Practice, By John B. Roberts, A. M., M. D., F. A. C. S., Emeritus Professor of Surgery, University of Pennsylvania Graduate School of Medicine; President of the American Surgical Association Membre De La Societe Internationale De Chirurgie, and James A. Kelley, A. M., M. D., Associate Professor of Surgery University of Pennsylvania Graduate School of Medicine; Attending Surgeon to St. Joseph's, St. Mary's, St. Timothy's and Misericordia Hospitals. Second Edition. Revised and entirely reset with 1081 illustrations; radiograms, drawings

and photographs. Cloth, Price \$9.00 1921, Philadelphia and London. J. B. Lippincott Company.

The preface of this book does that which readers often long for, to greater extent than before noted; that portion sets out rather in detail what might be termed the axiomatics of fractures, the consensus of opinion, the best conclusions, boiled down to fine point, nevertheless stressing what the authors correctly believe to be the dangers and common pitfalls to be known and avoided by the surgeon attempting to attain the best results for his fracture case. The lessons brought by war's experiences, if considered worthy, not controversial or experimental, are here included, and, as might be expected, those on fractures by gun-shot wounds, are up to the minute. The problem of the industrial surgeon likewise comes in for space commensurate with its importance, not as a "first aid" matter, as has too long been the case, to the detriment of that very important phase of American surgical endeavor. The book is unusually good.

**OPERATIVE SURGERY**

For Students and Practitioners By John J. McGrath, M. D., F. A. C. S., Professor of Surgery, Fordham University; Consulting Surgeon to the Peoples Hospital; Visiting Surgeon to the Fordham, Columbus and New York Foundling Hospitals; Fellow of the American College of Surgeons; Fellow of the New York Academy of Medicine; Member of the American Medical Association. Sixth Revised Edition, with 369 illustrations, including full-page color and half tone. 863 pages, Cloth, Price \$8.00, 1921, Philadelphia, F. A. Davis Company.

This issue of a very well known work contains ten parts, devoted to certain sub-divisions of surgery, as follows, "General Considerations", "Head and Face", "Neck and Tongue", "Thorax", "Abdomen and Back", "Rectum", "Hernia, Spermatic Cord, Testes, Etc.", "Urinary System", "Upper Extremity", "Lower Extremity". The work is a commendable standard and guide for students and practitioners.

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# THE JOURNAL

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### CONSERVATIVE INTRA-NASAL SURGERY\*

H. COULTER TODD, A. M., M. D., F. A. C. S.  
OKLAHOMA CITY, OKLAHOMA

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In intra-nasal surgery the pendulum has swung both ways, from exceeding conservatism to extreme radicalism. Today it is following the tendency of all surgery among the more skilled diagnosticians and technicians to conservatism. Both extremes may be highly at fault and be attended with serious and perhaps disastrous results to the patient.

Two things conspired to make early intra-nasal surgery more or less conservative. First, a lack of knowledge of the pathology of intra-nasal conditions, and Second, an insufficient training, and hence poor technique in intra-nasal surgery. Who would claim that conservatism based upon such grounds was always to the best interest of the patient, unless it is claimed that it was the best that might be had under existing circumstances.

The advent of cocain and adrenin and a thoro understanding of their proper applications in intra-nasal work was almost revolutionary in the hands of the skilled rhinologists of that time. Intra-nasal examinations came to be made with a skill and accuracy never before dreamed of, and rapidly led to a clearer insight into and understanding of intra-nasal anatomical structures with their proper relations, and enabled the surgeon so much better and with much greater ease to himself, and less discomfort to the patient, to study the normal functioning nose as well as the gross pathology which might be present.

Of even greater moment to the advance in rhinology with the use of cocain and adrenin was the use of these drugs to accomplish painless and bloodless intra-nasal operations. This proved an especial boon in rhinological work because of the special difficulties attendant upon this class of surgery under general anaes-

thesia, and where bleeding had hitherto been so hard to control. With these valuable aids to his work, the nasal surgeon began to undertake and to accomplish intra-nasal surgery which previously had been rarely attempted, if ever successfully, done, so that in a few short years the status of the rhinologist was completely changed. From a physician with about 5% of his work surgical and 95% medical, until today we call him a surgeon and he is eligible to fellowship in the "American College of Surgeons", with perhaps 75% of his work surgical and 25% medical. No one, we think, will claim that this change is due to a change in intra-nasal pathology, which today calls for surgical rather than medical treatment. Neither, we believe, will any one attempt to prove that the end results of present day rhinological work are not far better than they were in the earlier period.

One of the most important things that attended this remarkable change was the extreme radicalism which developed in the hands of the bolder surgeons, and was all too freely copied and emulated by the great body of aspiring rhinologists.

These extreme radical procedures reached their height about 1906 and 1907, and there can be no doubt but many very unfortunate, if not serious results, were obtained because of it. For a time it almost looked as tho every normal physiological function of the nose was to be wholly disregarded, and that intra-nasal structures were mere accessories—mucous membrane, turbinates and all—to be removed at will, to satisfy the whim of the rhinologist for radical intra-nasal surgery.

The gross atrophic pathology, as well as many other serious pathological and functional disturbances which followed this work, was bound sooner or later to call a halt, and the pendulum began to swing back to saner and more conservative work.

What do we mean by "Conservative intra-nasal surgery"? We would state that it is *surgery* which is *necessary* to overcome all pathology related to the nose without destroy-

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ing any portion of normal functioning tissues which of necessity need not be sacrificed.

In all our intra-nasal surgery we should keep constantly in mind the normal anatomy and the physiological functions of the nose. These are, olfaction, respiration with the warming and moistening of the inspired air. It is very essential that the nose be sufficiently open for the proper passage of air, but not too open, as this tends to render the inspired air dry and cold and causes the mucous membrane to become atrophied.

*Conservative intra-nasal surgery does not necessarily mean less surgery, but it positively does imply intra-nasal surgery done in such a manner as not to destroy or interfere with normal functioning intra-nasal structures.*

1. Surgery of the *turbينات*. The function of the turbinates is a very important one. They markedly increase the surface area of the inner nose and the normal mucous membrane acts as a radiator for the warming and moistening of the inspired air. Reckless removal of the turbinates, wholly or in part, is bound to induce serious pathology which cannot be overcome later, either by surgical or medical treatment, causing atrophic rhinitis, chronic pharyngitis and bronchitis. Not only should we guard against the destruction of the turbinates themselves, but a reckless destruction of the mucous membrane covering the turbinates by the careless use of the cautery is quite as disastrous. The inferior turbinate should seldom be interfered with surgically. If the posterior end becomes chronically swollen or hyperplastic and hence interferes with the function of the eustachian tube, this may be removed without damaging the function of the turbinate itself. If the entire turbinate becomes hyperplastic, as rarely happens, only the swell-body should be carefully removed, and the function of the turbinate is left undisturbed. In hypertrophic rhinitis, where the inferior turbinate is involved and it is found necessary to use the cautery, the greatest care should be had to destroy as little as possible of the mucous membrane, and hence not disturb the function of this important structure. We cannot stress too much the preservation of the inferior turbinates.

Rhinologists continue to deal more or less recklessly with the *middle* turbinates, and yet we are convinced that their function is quite as important as that of the *inferior* turbinates, and every observation leads to the conclusion that much unfortunate post operative pathology develops as a result of the reckless removal of these structures. Owing to the fact that the frontal sinus, the anterior ethmoids and the maxillary sinuses open into the middle turbinate has often seemed to render necessary

the removal of this structure as a whole or in part in infections of these sinuses. If such a condition prevails, we are absolutely opposed to the removal of the entire middle turbinate. Every bit of the turbinate that it is possible to leave and still establish proper drainage should be left, and personally we find it possible in many cases to do a complete exenteration of the anterior ethmoids and probe the frontal sinus and still leave the middle turbinate intact. In such instances we find that the cases get along much better and we are not bothered with the long and persistent scabbing which often follows the radical ethmoid operation, with the removal of a whole or a part of the middle turbinate. Of course the middle turbinate being a part of the ethmoid it may be diseased along with the other ethmoid cells and of necessity need to be removed. This can easily be determined before beginning our operation. We would insist, however, that it is by no means necessary to remove the anterior portion of the middle turbinate in all cases of radical anterior ethmoid operations or to make it possible to probe the frontal sinus.

2. Regarding operations upon the nasal septum. From our observation we are of the opinion that they should be done *more often rather than less often* than they are now being done, and still the rhinologists would be conforming to the admonition of this paper, namely "Conservative Intra-nasal Surgery". In view of the fact that sub-mucous work properly performed, can be done upon the septum and the normal functions of the nose in no sense interfered with, we firmly believe that this should be done, not only for pathological deflections, exostoses and ecchondroses of the septum, but often to establish patency in the nose when the turbinates are more or less hyperplastic or hypertrophied, as the septum, tho perfectly straight has become much thickened from hyperplasia or hypertrophy. In these cases, by the thinning of the septum, you can often restore the normal patency of the nose, so that the turbinates need not be interfered with, and the normal functions of the nose are not permanently disturbed in the least.

We are firmly convinced that all septum work, when it is at all possible, should be done sub-mucously, and would urge that the turbinates never be interfered with, if a nose can be rendered normally patent by thinning a thickened septum by means of a sub-mucous resection.

Many of you may not agree with this paper. We are giving you simply the results of our own observation and experience and in our hands post-operative atrophic changes have proven so unfortunate and unyielding to treatment, that we feel convinced that too much

care cannot be had in all Intra-nasal surgery, to enable us to avoid these unfortunate sequelae.

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### Discussion

*Dr. E. S. Ferguson, Oklahoma City.* I thoroughly agree with Dr. Todd in his statement that the turbinate bone should be left in the nose if it is possible to leave it. I have seen irreparable damage so frequently by the removal of the turbinates, whether it be the middle turbinate or the inferior turbinate. Apparently we get much greater damage to the physiological action of the nose by the extirpation of the inferior turbinate. However, it is quite necessary, frequently, to do something with the inferior turbinate, whether that be cauterizing or removal. In the type of cases where there is a true hypertrophy of the inferior bone, where the lower edge of the turbinate is pressing against the floor of the nose, there is nothing to do but remove that part of it, but the practice of some rhinologists in taking a pair of heavy nasal forceps, grabbing the turbinate and twisting it out which was done a few years ago and still is done by a few men, is a very pernicious practice. There is no question but that there has been too great sacrifice of the normal, nasal tissues in those cases where operation is required. Instead of taking off enough of that part of the turbinate which is diseased or enough to give the proper aeration, the tendency was to take out the whole thing. There is where the danger lies. The atrophy which follows the removal of turbinate bones is incurable, in my opinion. The only thing to do and the only hope for the patient is constant cleansing with some stimulating solution to keep up any comfort whatever. The ideal operation in a number of those cases where there is a marked bend of the bone to one side is the sub-mucous resection, and by proper operation the tissues return to the normal condition in numbers of cases without interfering with the turbinates, or, if surgery, very little—slight cauterizing or maybe the removal of a slight part of the enlargement.

Dr. Todd's suggestion that as little of the mucous membrane be removed in intra-nasal surgery as possible, is an excellent one. That mucous membrane is required for the proper functioning of the nose and should be retained wherever possible. Even in the removal of the turbinates it is not necessary to remove all the mucous surface covering that turbinate and I wish to emphasize what he said, and that is to preserve, if possible, the mucous covering of the nasal bones.

*Dr. W. T. Salmon, Oklahoma City:* Mr. Chairman, I do not entirely agree with Dr. Todd—that the nasal septum is entirely at

fault with all turgid conditions of the turbinate bodies. This being a part of the nasal cavity there is no reason why that could not become diseased just as well as the septum. I think that we are doing too much work upon the septum. If you have a crooked septum or an enlarged septum which is there making pressure, a sub-mucous or some other operation is justifiable. If we have a turgid condition of the turbinate bodies, other conditions being normal, some operation on the turbinates is indicated. But it is not necessary to remove them unless there is a diseased condition of the bone. It has been my practice for a long while to do sub-mucous operation upon these bodies, to dissect the mucous membrane as far as possible, and I have a special curet—I never saw one like it—that I use. It is not exactly what I would like to have, but I go in there and curet everything down to the bones and let the mucous membrane fall down.

There is another condition which this paper did not mention, but speaking of conservative surgery, it is appropriate to mention the many unnecessary operations for adenoids. We started out to educate the public upon adenoids. I think they are over educated. I think that the laity have learned, through the newspapers and other periodicals, that there is such a thing as adenoids and they believe any condition they may have of the nose, whether turbinated bodies or the septum, is all due to adenoids and I think thousands of cases have been operated on for removal of adenoids where there were no adenoids. Not only do specialists do it but the general practitioner and the surgeon, and they are getting in the habit of going in there with the curet and taking out all that mucous membrane. I have seen a number of cases who had atrophy and the glazed condition of the mucous membrane of the throat following an unnecessary operation for removal of adenoids. I have had patients come to my office for diagnosis and I have advised them that they did not have adenoids. I know that some of them afterwards were operated upon for adenoids. I have seen them afterwards and they were in a much worse condition for having had adenoids removed where there were no adenoids, than they were before.

*Dr. A. L. Guthrie, Oklahoma City:* Mr. Chairman and gentlemen, the doctor's reference to the turbinates is exactly my opinion on the subject. I think that the turbinates should rarely be interfered with. I disagree with his statement that he believed there should be more septal operations. I think we are doing too many septal operations as well as too many turbinate operations. There has been a tendency in routine nasal examination—eye, ear, nose and throat examination—when we find a



nasal spur or deflected septum, to tell the patient immediately that they should have an operation upon the septum. I think that is a mistake unless there are definite symptoms attributable to this deflection or exostoses or what not. For example, in the aged, people fifty years of age or over, who come in with deflected septums or distinct spurs on the septum, unless we know that this is causing an interference with the proper currents of air or the proper drainage of secretions, unless we are absolutely satisfied this is the case, these patients should be left alone as they invariably will be worse after the operation than they were before, regardless of the type of operation you perform.

The patients who have a slight atrophy on one side with an apparently normal nasal cavity on the opposite side, or possibly a hypertrophy, breathe better through the congested side than they do through the atrophic side. In my opinion these are not cases for operation. I am satisfied we are over-doing all intra-nasal operative work, especially septal work. There has been too much of a tendency to operate on everything that is apparently abnormal about the septum.

*Dr. A. W. Roth, Tulsa.* Mr. Chairman, I have seen several sub-mucous operations several years after the sub-mucous operation has been performed and they certainly do not all come out with such perfect results as might be desired. They are very frequently complaining of the scabs that form around the line of incision and are annoyed for years after, and these cases are coming in from everywhere two or three years after the sub-mucous operation.

My experience with my little work on the turbinate has been such that it does not justify me in leaving the turbinate alone all the time. I think that the inferior border of the inferior turbinate can be removed and wonderful benefits derived from it and no ill effects, and I also believe, firmly, in the cautery of the inferior turbinate with splendid results and no ill effects.

*Dr. T. W. Stallings, Tulsa;* I think one of the great indications for sub-mucous resection is the salpingitis and interference with the hearing and as far as the results of a sub-mucous is concerned, it depends a great deal on the character of the operation and the operator as much so as it does on the operation itself. A great many of our operators are not thorough enough in their removal of their tissue. They do not remove enough of the hard tissue; they do not go back far enough; they do not get their ridge and they tear their tissues very severely and that always leaves the scab Dr. Roth speaks of and it always leaves the nose in that chornic condition he speaks of. However, you will see a great many of those cases

that have been operated for atrophic rhinitis and those cases are always injured by a sub-mucous resection and they should never be. Of course, you have got to know the history of your case from the beginning to know how much results you may expect to get and should be expected. The operator, the condition of the nose to start with and the tendency of your patient, climatic condition and many other things will influence the nasal mucous membrane. The patient may be subject to rhinitis of the hay fever variety and those things that will give you a hypertrophic condition that varies at times. You may see the patient some time when he is doing fine and you may see him later when he is having serious trouble.

I had an interesting case the other day. A gentleman who had been handling one of these pollen insect powders who gave a history of every time he used it he developed hay fever. I don't think I ever heard of that before and I had never associated the insect powder with the hay fever infection before, however, I realize it was of the pollen base. In fact, I never had such a direct history on those conditions. It is one of the insect powders—it would not be fair to say which it was, but they are all of the same base—they are all of the pollen base.

As far as the difference in the two nostrils, this gentleman here (Dr. Guthrie) spoke of one side being hypertrophied and the other side being normal. The hypertrophy is always on the concave side, evidently an attempt on nature's part to balance the breathing spaces of the two sides.

*Dr. C. M. Fullenwider, Muskogee;* Dr. Stallings mentioned one thing that wasn't included in the paper but I think it will probably bear a little discussion, and that is the effect of the intra-nasal operations on the hearing. I think in the past, at least, we have been a little bit too free to promise improvement to these people with considerable grades of deafness by means of a nasal operation. There is no question, probably, that correction of the nasal deformities and obstruction, if done early enough, has a very marked influence on the hearing, and there is no question but what, in many cases, they are the entire etiology of the deafness. But on the other hand, when deafness is established and when you have your changes in the tube and more especially in the tympanic cavity itself, then you need to be cautious in promising results to the hearing from the intra-nasal operation. In a great many cases you are disappointed. You may check the changes, or the increase of the change may check the increase of the deafness, but I think that after the changes have taken place after the deafness is established and especially

if it is of considerable standing and the changes are marked, that they can only look for disappointment in nasal operation.

*Dr. J. E. Davis, McAlester:* Mr Chairman, I don't have anything new to say except that I want to agree with Dr. Todd regarding conservatism on working in turbinates and to emphasize what he said. I think the greatest crimes in surgery are done on the nose on the turbinates. Any excuse seems to be sufficient for some men, unfortunately. I want to refer to a case I have seen recently of a malignancy involving the antrum and ethmoid and the tear sac and all those parts which, unfortunately, was operated on some six months ago. The middle turbinate was removed and, I suspect, the ethmoid cells curetted. This case has progressed very rapidly since then and she has been taking radium and X-ray treatments recently but has not improved at all. I don't know what the Rochester treatment would do in this case or what it would accomplish—that is, going into the interior with the soldering iron, cauterizing it and then introducing the radium into the antrum and perhaps that might be of some value, but I believe the patient's death is being hastened by the fact that she had an operation.

*Dr. M. K. Thompson, Muskogee:* Mr. Chairman and gentlemen: I hesitate now to discuss this paper because I haven't heard the discussion, but I do want to commend Dr. Todd on the excellent paper he has written and it is something that we all know is needed—I don't believe as badly as it was several years ago because I believe the pendulum has begun to swing backward and, as Dr. Todd says, we have been doing and seeing too much of this reckless destruction of tissue in the nasal cavity. We destroy anatomy there that is essential towards the proper breathing and proper use of air and even now we hear very frequently of some one saying if they will have the turbinates, especially the lower turbinates, removed, it will stop that ringing in the ears. I have seen several cases of it recently where the people have been guaranteed the fact that if the turbinates are removed the ringing in the ears will stop where they have become hard of hearing. I have never seen a case of that kind where they would get any permanent cessation of this ringing, especially inasmuch as the ringing is due to probably an internal trouble rather than a middle ear trouble. So I fail to see why or where this ringing would cease permanently by the removal of the turbinate bone and I believe, as Dr. Todd has brought out, that we must be very careful in removing these turbinate bones and this reckless operation in the nose.

*Dr. H. Coulter Todd, Oklahoma City:* Closing. Dr. Ferguson's statement that there

are cases of hypertrophic rhinitis that the turbinates must be operated, is very true indeed. That is the type in which I said that I thought if it is absolutely necessary to operate these cases I think the swell-body of the turbinate is the only part that should be removed.

Dr. Salmon misunderstood me entirely. I realize that in listening to a paper on an occasion like this that it is very difficult to grasp the entire thought of the paper and we are liable to be misunderstood. I did not state, nor did I want to imply, that the nasal septum was at fault always or at most times in cases of turgescence of the turbinate bodies. The point I was trying to bring out was simply this;—that when you have a nose that is not normally patent so that the patient can not breathe through that nose, the functions are disturbed and drainage is interfered with. We often can render that nose perfectly patent by thinning a thickened hyperplastic or hypertrophied septum by doing the sub-mucous, leaving the turbinates absolutely alone notwithstanding the fact that there may be hypertrophy or even hyperplasia of these bodies.

Dr. Guthrie said there were too many septum operations. That may be true. Nevertheless, I will state that a septum operation, if done with care and good technique, does the least harm intra-nasally of any operation we do. You do not disturb the balance in nasal conditions; you do not destroy the mucous membrane of the nose and after you are through you have the normal, functioning membrane there still.

Dr. Roth's statement about the scabs following the sub-mucous. I have to agree with Dr. Stallings that I can not help but believe that the operator has had a misfortune. Either he has gotten some infection and the mucous membrane has sloughed and scar tissue has developed or he has damaged the mucous membrane so that its function has become destroyed. I have never seen that tendency in a septum where the sub-mucous was done with the perfect results that ought to follow a perfect technique.

I realize the value of the cautery that Dr. Davis speaks of and yet I wish I could get away from its use entirely. I will grant that the patient is mightily relieved and very happy over the results for a year or so, perhaps, but if you are not exceedingly careful you are going to get the same atrophic changes with the use of the cautery that you do from the other types of surgery.

I appreciate very much the discussion of this paper. I tried to bring out some points that would lead to the conservation of the intranasal tissues, and I hope I made myself understood.

I thank you.



## MALIGNANCIES OF THE EYE\*

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The movement for the control of cancer, largely one of education of the medical profession and the laity, will also have an influence on the scientific conception of cancer. It makes no discrimination between the various forms of malignant new growth, but places its emphasis on malignancy. It uses the word cancer in its old significance, its still common popular sense, to include every tumor or ulcer that tends to indefinite extension and to ultimate cachexia and death.

For about sixty years, since Virchow published his view of cellular pathology and the classification of tumors, the study of malignant new growth has run chiefly to the study of their cell morphology and the identification of their cell ancestry. This has been followed by an attempt to restrict the term cancer, to make it synonymous with carcinoma, a name to designate only tumors of epiblastic origin. The cancer cell in the body corresponds to the criminal or lunatic in the community. It is no more important to trace its ancestry thru the epiblast or the mesoblast, than to ascertain whether the criminal is negro, Chinese or the degenerate offshoot of one of our first families. The criminal has lost the character and relation that would make him useful and has become a menace to the community, so that he must be removed from it. So the cancer cell has lost the characteristic of the gland cell or endothelium, has reverted to the tendencies of some very low and primitive form, throwing off the restraints of all higher organization; and must therefore be removed from the cell community. It is not most important that a man is white or black or yellow if he is criminal; not most important that a cell is epiblastic or meoblastic if it is essentially malignant.

Malignancy seems gradually to develop in cells that have gotten out of the line of functional usefulness—the gland cells of the breast, the papilloma of the lids or corneal limbus, or perhaps even the chronic chalazion. The practical attitude is to regard every cell mass as a possible breeding place for cancer, and remove it before any cells with a distinctly malignant tendency have developed within it.

A tumor of the choroid is almost always a sarcoma. It is very seldom that any other form is met with in practice. It happens occasionally that a metastatic carcinoma develops in the choroid; in these cases the primary growth is usually situated in the breast; it is found less often in the internal organs. As

regards other intraocular growths sarcoma is easily differentiated from them as a rule. Glioma is a disease of early childhood, while sarcoma is met with in the advanced years of life. The picture presented by the amaurosis of glaucoma is not the same.

The prognosis is always grave. We never know with certainty whether the tumor cells have been carried already into the internal organs or not. Metastases have been known to appear even years after an early enucleation. On the other hand, some patients are completely cured after the operation.

The only malignant tumors met with in the conjunctiva are epithelioma and sarcoma.

An elderly man states that something has been growing over his eye for several months. It was noticed first by members of his family, but he paid no attention to it, until recently, when it began to grow rapidly and to interfere with his vision.

On the inner side of the eye near the margin of the cornea is a flat, whitish gray, fairly firm growth which has involved a great part of the conjunctiva bulbi. There is no ulceration. The growth moves back and forth with the conjunctiva, but is firmly adherent to the limbus, whence it extends into the cornea where it is absolutely immovable, if the age of the patient is taken into consideration with the fact that the tumor is growing and menacing the vision, it becomes evident that it is a malignant tumor.

The malignant tumors met with on the eyelid are carcinoma and sarcoma.

In the year 1915, a lady 50 years old called at my office. She had had a carcinoma of the lower lid for about two years. Someone had used arsenic paste and this had increased involvement of the conjunctiva and cornea, also the upper lid. The patient was blind in the eye. I did an exenteration of the orbit, removing the eyelids and skin from around the eye, on the temporal side the skin was removed to the hair line. The cavity all filled in by granulation skinned over, and the last I heard the patient was still living, without recurrence.

Glioma is a malignant neoplasm that starts upon the retina. The first clinical characteristic of the tumor is that it is met with exclusively in early life. Ordinarily it occurs during the first four years. This indicates a congenital predisposition of this form of tumor, which is also suggested by its second characteristic, its appearance in families. Glioma is one of the most malignant of tumors and the diseased eye must be enucleated as quickly as possible.

One of my cases was a boy six months old. The mother first noticed the eye was yellow, and the father jokingly said he was cock-eyed.

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Soon after noticing the yellow color in the eye, the mother made a visit to the child's grandfather, and he was a physician, but he did not think it anything serious, but after visiting him for a month he decided to have the child's eye examined. The eye was enucleated, but the child soon had a recurrence and died.

Another case was a boy four years old. His family physician consulted me in regard to the eye, thinking he had cataract, but when I examined the eye I told him it was glioma, and advised immediate enucleation. The father was not satisfied, and consulted another oculist who said it was not glioma, and did not operate. About two months later, he decided it was glioma, enucleated the eye, but the child had a recurrence and died.

### Discussion

*Dr. M. K. Thompson, Muskogee:* There is no question but what all of us have been unfortunate enough to have a great many of these cases of all kinds and it would not do for me to undertake to tell about some of them but there is one I would like to speak about. This was a gentleman past sixty who had been under treatment for some time and had been advised to have his eye enucleated. Finally after the entire lower lid was gone and the eye-ball itself was very badly eaten, he decided to have it worked on. He was suffering a great deal of pain, very nervous, not able to sleep, running a temperature of anywhere from one to three degrees and he lived in a neighboring town and I consented to go over there and remove his eye. I took along with me some of these soldering irons. After looking it over I decided that would be the way I would enucleate it, with the soldering iron cautery. We anaesthetized the man and began to use those irons. Had three of them. We would heat them over a gas stove and have them pretty hot. We burned away the entire orbital cavity, the lids and all as both of the lids—one was gone and the other lid was badly destroyed, or partially so. It took an hour and a half and if you have never done one of these operations you don't know what you are up against, in burning away the entire contents of the orbital cavity, and that was something more than an eye. He had no more shock than he would have had had we enucleated the eye. He was up and went home from the hospital the next day and made an uneventful recovery, went back to work and has no indication of a return or recurrence and is doing nicely and so far the operation is a success; the patient still lives.

But I have had several unfortunate cases of glioma in children, it is a condition that must be attended to at the earliest period

possible. I make it a point, especially in elderly people when they come for examination of the eyes and fitting glasses, to look into the eyes and find if there is any sign of a tumor. I have been fortunate enough, or unfortunate enough, to locate one or more that had been overlooked and in that way believe I have saved a few lives, so I think, in examining people past the age of forty, we must be careful to look inside the eye at every opportunity for examining for change of glasses, especially if they have had some frequent changes for these tumors and advise, usually, an early removal of the eye. Most of these tumors, as we know, that develop in the eye, are of cancerous nature. The paper appealed to me because I too have been unfortunate in having, in a number of different forms, malignant growths of the eye, both external and internal and have had results like the rest of you; sometimes very poor, but that is what we expect of those cases, as a rule.

*Dr. W. T. Salmon, Oklahoma City:* I would like to add this. In malignancy of the eye or any place else, early diagnosis and treatment, I think, is important. We know that in every malignant tumor, if diagnosis is late, it is going to be fatal, but a large per cent of these patients if seen early, all diseased tissue removed and the radium treatment applied, many of them have a chance to get well. Unfortunately, they don't come to us early. If we could impress on the people and teach them that when things like that occur if attended to immediately they have an opportunity which is far better than waiting for a long time. The end is surely fatal if procrastination occurs.

*Dr. W. Albert Cook, Tulsa:* Dr. Salmon and Dr. Thompson brought out a point which is of the greatest importance in these conditions and that is early recognition. I think Casey Wood claims there is about one case of sarcomatous infection of the eye in every ten thousand eye patients of the regular run that come through and we may overlook several of those. Lots of times the only thing will be a little bulging of the retina on the inside of the eye-ball which is discovered with an ophthalmoscopic investigation. The patient is not cognizant of there being anything there and these conditions, so many of them, if they are discovered early and extirpated, will be cured, that is, if they are conjunctival or bulbar and if they are in the choroid where the majority of them appear, then enucleation of the eye-ball will often prevent a recurrence. But if they are allowed to go we will get the metastatic condition in other parts of the body.

I have had some of these epitheliomas that I have gotten early and removed them thoroughly and have had very good success. I had

one case in particular, I remember, of sarcoma. It was located in the arch of the orbit and seemed to be perfectly localized and I removed it and I got a healthy scar, to all appearances. The patient moved away. About two years afterwards I got a letter from him saying it had developed again over the supra-orbital plate, involved the eye-ball so that it was necessary to enucleate the eye and also remove a portion of the bony arch of the orbit.

*Dr. Davis:* Closing: I certainly enjoyed the discussion of this paper. In regard to glioma, I think that we should all speak to general practitioners because there are many—glioma is such a rare disease that many of the general practitioners never think about it and probably never saw a case and it is just like this little child I was speaking of. Grandfather had never seen a case of glioma and he had the child for a month before he attempted to examine him. So I think in our medical societies we should discuss glioma so that the general men will think more about it and when they see an unusual condition in the eye they will have the eye examined.

In regard to the case in which I did the excision of the orbit, I haven't heard of the case for about a year. About a year ago she was still living without recurrence but this was a case where the whole lower eye lid was gone, the conjunctiva and cornea involved, about half of the upper eyelid was gone. We removed the periosteum and the skin way down on the face about like this (indicating) coming out here to about the hair line and about one half of the eye brow coming up more like this (indicating) it was an awful looking case after the operation, but it all healed and granulated and skinned over nicely and was looking well the last time I saw her.

*Chairman Westfall:* I think this subject Dr. Davis has just been talking to us about is one of the most important we have today for the reason, if for no other, than, being one of the rarer conditions, we are more or less likely to be caught off guard and it will keep us thinking about the condition and probably be of a good deal of help to us in that way.

At this time I want to take the opportunity to thank the men who have made this meeting today possible. I think there has been a very successful and a very instructive session. The discussion has been good, to the point and the discussion has not been discussed.

#### SPINAL FLUID IN CONGENITAL SYPHILIS

The study of selected cases, made by Lyle B. Kingery, Ann Arbor, Mich. (*Journal A. M. A.*, Jan. 1, 1921), emphasizes the important frequency with which cerebro-spinal involvement is associated with prenatal syphilis. The importance of the routine lumbar puncture is again urged, not only because of its immediate value as a diagnostic procedure, but also on account of its influence on the ultimate prognosis in a given case.

#### THE PNEUMOCOCCUS IN THE EYE, EAR, NOSE AND THROAT.\*

EDWARD F. DAVIS, M. D., F. A. C. S.

OKLAHOMA CITY, OKLAHOMA

The Pneumococcus—also called the Streptococcus or Diplococcus Pneumoniae, Micrococcus Lanceolatus and Pneumococcus of Fraenkel—is a small elongated coccus occurring in pairs or in short chains. It is non-motile and has no flagellae. When grown on certain media, it frequently shows a well marked capsule but this generally is absent when grown outside an animal body. Growth on ordinary media is slow and certain strains appear to be incapable of propagation.

The best culture media contain human or animal serum—ascitic or pleuritic fluid etc. Temperature range for growth is restricted to 27 to 42 degrees C. and the culture may die in a few days although, in the above named fluids, they have lived for eight months. In dry sputum, the organism has existed for fifty-five days but life in dry dust is short—only a few days.

The Pneumococcus may be found on all mucous membranes but it is most common on those of the respiratory system. It occurs in the blood also and may be found in many of the internal organs. While pulmonary involvement produces Pneumonia, infection of other mucous membranes is followed by a more or less typically superficial, though obstinate, inflammation showing no tendency to invade the lungs.

In Pulmonary infection, it is present in the blood in from 90 to 95%. There is a resemblance between the Pneumococcus and the Streptococcus Pyogenes and it is stated by Rosenow that the Streptococcus Hemolyticus, in certain growths, may be converted into the Pneumococcus and vice versa. Although the Pneumococcus has some of the characteristics of the Staphylococcus and the Streptococcus, the results of infection usually are much milder. The simple "cold in the head" often is caused chiefly by this organism.

During the past few years, since Influenza has been so prevalent, pneumococcic infections of the mucous membrane of the head seem to have become more common. It has been demonstrated in military as well as in civil hospitals and practice that, of all the acute conjunctival infections, the Pneumococcus is present in more than seventy-five per cent. In the majority of cases it is the predominating organism.

Of eye infections, acute contagious conjunctivitis or "pink eye" is, by far, the commonest.

\*Read in Section on Diseases of the Eye, Ear, Nose and Throat, McAlester, May 18, 1921.

Formerly, this was supposed to be due to the Koch-Weeks bacillus but recent investigations have shown it to be due to the *Pneumococcus*. The infectiousness and the contagiousness of this condition have been proven by accidental as well as by intentional inoculation. The history of previous Influenza or Pneumonia infections—especially with *Empyema*—seems almost as positive a diagnostic element as the laboratory reports of smears and cultures.

The bulbar conjunctiva shows considerable enlargement of the vessels, especially in the fornices. The whole eye appears red—hence the pernicious term “pink eye”. There may or may not be free accumulation of mucous or muco-pus and, at times, chemosis. Corneal involvement is rare but when it occurs, usually it is in the form of moderately superficial ulceration at the limbus. Subjectively, there is burning and itching of the lids in addition to photophobia. Under the usual treatment for acute conjunctivitis, this form of infection is very stubborn and the symptoms, both subjectively and objectively, continue or increase until it may appear that there is iritis. After a few days, a pure infection becomes mixed and it is not unusual to find such other organisms as the Koch-Weeks and the Morax-Axenfeld bacilli. In the latter, there may be marked blepharitis especially toward the angles of the lids and, for this reason, it has been named “angular conjunctivitis”.

*Pneumococcic* infection may appear in the new-born and be mistaken for gonorrhoeal form. In this connection, it might be well to refer to the fact that a vigorous application of the Crede treatment as a preventative or blenorhoea neonatorum might produce an active muco-purulent condition and cause the obstetrician much unnecessary distress.

Embolic processes may occur in the eye—extending from pulmonary conditions—and result in a pneumococcic panophthalmitis.

The nose and throat, while harboring the *Pneumococcus* non-pathogenically, often show active infection. In the ordinary “cold in the head”, it is possible to find almost pure cultures early although the usual companions—*Micrococcus Catarrhalis*, *Bacillus* of Friedlander and the *Influenza Bacillus*—appear in a short time. The same is true of the pharynx and the tonsillar region and, as stated before, these pneumococcic conditions are much more common since the recent epidemic of Influenza.

A marked characteristic of pneumococcic infection of the nose and throat is the lack of proportion between the subjective symptoms and the local appearances. Usually, in pharyngeal involvement, especially, the mucosa appears red, moderately dry and covered by a

layer of thick tenacious mucus and, particularly pronounced, is the fact that the subjective symptoms are very much aggravated toward the latter part of the day and during the evening.

Acute laryngitis may be caused by the *Pneumococcus* in the presence of other contributing causes such as exposure, excessive use, etc.

Acute catarrhal otitis media may depend on this organism and it is not unusual to find it alone in the early stages of suppurative otitis media. In this as well as in the nose and throat affections, the infection rapidly becomes mixed. The commonest organisms in the order of their frequency are the *Pneumococcus*, *Streptococcus*, *Staphylococcus*, *Bacillus* of Friedlander and the *Influenza Bacillus*.

Ear infections probably are the most disastrous of the sequelae of Influenza—aside from pulmonary and pleural involvement. It seems possible that the frequency of the *Streptococcus Hemolyticus* in acute middle ear and mastoid infection may be traced partly, at least, to the close relationship to the *Pneumococcus*. As in throat infection, pain is more conspicuous at night. In non-suppurative otitis media, with tendency to frequent recurrence, it appears likely that an attenuated strain of *Pneumococcus* may be the cause.

### Discussion

*Dr. C. M. Fullenwider, Muskogee:* I have been rather interested this last winter in the pneumococcus, particularly in the infections of the mastoid, and the middle ear. Of course, for several years it has been pretty well understood, or thought at least, that infection with the streptococcus mucosus practically always called for an operation when the process was with any severity. I think it is Kerrison that says in a case of mastoid infection by streptococcus mucosus if the symptoms haven't disappeared within two weeks, that is sufficient indication for opening the mastoid. I have had two or three cases that have made me wonder if the close relationship of the pneumococcus and the streptococcus mucosus might not make something of the same order applicable to the pneumococcus infection. The first case was a mastoid. This boy had a very acute attack of otitis media and I think about twenty-four hours from the onset of the attack I opened the drum. The case did very well and ran rather the ordinary course, but there were some mastoid symptoms. But they cleared up in the first week and then the discharge was a little slow in clearing up but nothing particularly unusual. After the perforation had been closed for four or five days and was apparently all right, the swelling and pain recurred. I re-opened the drum but the mastoid symptoms increased and



within a short time I opened the mastoid. This mastoid—I think I did a clean operation on this and I was as well satisfied with my work as I ever am—and this mastoid healed without any complications except that there persisted a muco-purulent or rather a thick discharge from the antrum. The entire cavity filled in, except the antrum, and the tract leading down to it. I curetted that antrum a number of times. I curetted it thoroughly and I came to the conclusion I must have left some dead bone behind and I was about ready to re-operate the case—this was a pneumococcus infection and I thought I would try the effect of ethyl-hydrocuprine on this case. I forced perhaps a half dozen drops of the one per cent solution through the antrum into the middle ear and down into the eustachian tube. The boy complained of smarting for perhaps five or ten minutes, but from that time on I never had any discharge from the antrum. I repeated the injection of the ethyl hydrocuprine and had no more trouble with the healing. That is the only case I have tried with the hydrocuprine. I don't know whether I will find another case of that or not but it occurred to me that might easily be worth a trial in stubborn cases of otitis media of pneumococcus infection.

At the same time I had this I had another case that did not develop mastoid but had the same sticky secretions and that case was about twelve weeks in getting well. I would think I had the discharge under control and perforation closed, or nearly closed, and it would flare up again, but that finally got well under ordinary treatment. But in such cases hereafter I think I will try forcing the ethyl-hydrocuprine through the middle ear and force some through the eustachian tube. There is no question besides being stubborn that these cases of mastoid infection of pneumococcus can be very serious.

Dr. Thompson and I had a case perhaps three months ago of a girl sixteen years old who had developed otitis media. She suffered intensely for about ten days time. She was in the hands of a general practitioner who refused to open the drum or allow it to be opened and who said it would have a bad result if the drum was opened. He left town and Dr. Thompson did a paracentesis that evening and the next day he repeated the paracentesis. That was in the morning and at noon I saw her with him. That morning she had developed meningitis. A puncture was done and the fluid was cloudy or amber color and it showed a pure culture of pneumococcus. We opened the mastoid. There was no bulging of this drum and there was no pus in the outer layers of the mastoid but in the tip and scattered through that

mastoid we found necrotic areas filled with pus. We opened the middle fossae and opened the dura and explored the cerebrum and we found no abscesses in the substance of the cerebrum, but we found pus between the layers of the dura. These cases have made me wonder whether we were giving enough attention to the pneumococcus as an infection. Of course, these cases won't do to generalize from.

We ordinarily think, for instance, that the staphylococcus is rather a mild organism and are not ordinarily afraid of the cranial complications of the ear infection from staphylococcus and yet I have seen two cases of death from meningitis where staphylococcus was the organism. I don't know how the rest of you do but I am convinced that I do not take enough cultures and don't watch for the organism and don't identify the organism often enough in these cases. I think, possibly, if we made a routine investigation of that we would gain some valuable information.

*Dr. Thompson:* I agree with Dr. Davis about these organisms, and Dr. Fullenwider and I have seen some cases together, but these cases in particular I want to explain a little further. This girl was dying and she would get blue and her respiration was entirely suspended for a half minute at a time and then she would brace up a bit and go on breathing and when we took the spinal fluid that relieved the pressure somewhat and she began to color and respiration was pretty good and we thought probably by relieving the pressure on the brain we might give her some relief but it was a very serious case and in very bad shape when we first saw it. I saw it just the evening before and I was glad to have some help when I saw it. But these eye cases we have very frequently and are able to diagnose almost without the microscope but sometimes we take them for granted. They usually clear up under treatment and we pat ourselves on the back, but they hang on sometimes, too, regardless of all you can do, for a long time, and you wonder what the trouble is while if we had gotten a microscopical examination made earlier we might have determined it and saved ourselves lots of trouble.

*Dr. R. O. Early:* Dr. Davis did not take up the treatment of these cases and I just want to give you the result of a series of cases that were run down at Camp Travis while I was there by Dr. Stark of El Paso, on pneumococcus infection of the eye. He used three per cent solution of quinin sulphate in those cases and he reported his results as clearing up from six to eight days with the quinin sulphate and from an average of two weeks with the silver nitrate and three weeks from zinc sulphate. How much there is in that I do not

know. I always supposed there would be a precipitate with quinin solution acting as an irritant in the eye, but he claims there is not,—that all of his cases—and I forget how many series he ran of each—cleared up from ten days to two weeks and more rapidly under a three per cent solution of quinin sulphate than anything else. I am just giving you the results as I remember them.

*Dr. E. S. Ferguson:* Mr Chairman, I never have seen any benefits derived from the use of nitrate of silver or its derivatives in those acute conjunctivitis cases of so-called "pink-eye". I don't think that any irritating remedy does you any particular good. I can get them well in half the time with boracic acid solution than I can with nitrate of silver solution. The question of quinin sulphate comes up in these cases. If it is a pneumococcic infection, like a good many of the recent investigators are known to believe that a majority of the cases of the true pink eye are, then some form of quinin is probably advisable. The remedy spoken of here, optochin, will act as a specific in those cases of true pneumococcic infection and I see no reason why you should use quinin sulphate which is an insoluble solution, when you have this remedy which is so much better. I have said before that I am not ready to quite subscribe to the fact that all the cases that we have been in the habit of calling pink eye are pneumococcic infection. That has not been the general belief and then we will have to get a new name for these cases which are pneumococcic and these which are Koch-Weeks bacillus infection. The optochin will not do any good in the Koch-Weeks bacillus infection.

*Dr. Davis:* Closing: I purposely did not say anything about the treatment of these conditions and thought it would be brought out in the discussion but I do want to express my unbounded faith in the use of ethyl-hydrocuprine hydrochlorid. I haven't had any personal experience in comparing the results of its use with those wherein quinin is employed in such series as Dr. Early mentioned, but it seems to me that in the large number of cases of conjunctivitis which were due to the pneumococcus that we had at McArthur that they yielded in much less than eight days and they did not have anything but the optochin.

The question of pink eye, so many conditions have been called pink eye that it is a term that ought not to be used on account of its indefiniteness. To call it a pneumococcic conjunctivitis or Koch-Weeks or something else according to the laboratory report is much more scientific.

There seems to be a very close relationship between the pneumococcus and the streptococcus hemolyticus. They are supposed to be transitional forms of the same organism—that

is, one may be converted into the other. At Camp Taylor where they had so many mastoid cases, practically all of them showed the pneumococcus or the streptococcus hemolyticus and it became customary there to open the mastoids in all cases of otorrhoea that showed this organism, and out of 208 of these cases I don't know of a single mastoid that was opened that didn't have pus in it. I thoroughly approve of Dr. Fullenwider's idea about treating these old mastoid cases with optochin. I don't see any reason why the results of its use in pneumococcic cases would not be just as satisfactory as in proper eye conditions.

## VITREOUS OPACITIES\*

W. ALBERT COOK, M. D.

TULSA

The greater part of the interior of the eyeball is occupied by the vitreous body, which is situated between the lens and ciliary body anteriorly and the internal limiting membrane of the retina posteriorly. It is composed of a jelly-like substance perfectly transparent called the vitreous humor, invested with a delicate capsule known as the hyaloid membrane. The vitreous humor consists mostly of water with a few corpuscular elements and a small percentage of carbonate and chlorid of sodium, giving it an alkaline reaction. It has a depression anteriorly, on which the lens rests, known as the fossa lenticularis, and a lymph space extending from the optic disc to the capsule of the lens. This is the canalis hyaloideus, and behind the lens constitutes the "postlenticular space." It is a lymph space and communicates with the anterior chamber and with the intervaginal spaces of the optic nerve. In fetal life it is occupied by the hyaloid artery, which sometimes persists in the adult.

Among the commoner causes of opacities in the vitreous may be mentioned the following: Choroiditis, iridochoroiditis, cyclitis, iridocyclitis, intraocular hemorrhages, injuries, myopia, retinitis, uveitis, anemia, loss of sleep, gout, syphilis, menstrual disorders, constipation, portal congestion, malaria, long continued use of arsenic, senility, elderly persons with atheromatous arteries, hemorrhages after severe strains, excessive use of stimulants, leukemia, emphysema, dysentery, cholera (all varieties), metastatic choroiditis following puerperal fever, exanthematous diseases, influenza, microbial invasions from old operative wounds, tuberculosis, nasal accessory sinus diseases, animal parasites, idiopathic inflammation, detachment of the vitreous, fatty degeneration of the vitreous and cholesterol crystals in the vitreous.

\*Read in Section on Diseases of Eye, Ear, Nose and Throat, McAlester, May 18, 1921.



Cataracts and glaucoma are frequently complicated by opacities in the vitreous.

The diagnosis of opacities in the vitreous is a very important matter, as the vision may be entirely lost in patients who neglect to seek relief. These cases should be referred to the specialist promptly, as it is only possible to detect this condition and many of the underlying diseases of the ocular structures which causes it, by the most careful and painstaking ophthalmologic examination. The opacities are of two varieties, fixed and floating, and present every conceivable size and shape, and when viewed by the ophthalmoscope appear as dark objects against the fundus, resembling soft coal soot or black moss. These masses when fixed in the line of vision constitute a serious obstacle to vision, while if situated to one side may not disturb the patient very much. I have found, however, that when the opacities are floating about with every movement of the eye, the patients are greatly alarmed in some cases and in others much annoyed.

Various devices are resorted to in order to see them, such as the plain or concave mirror, strong or weak lenses, according to the depth of the opacity, and strong or weak light in certain cases will render them visible; also varying the distance from the observer to the patient will bring all the different parts of the vitreous into view, if the vitreous is otherwise transparent. Foreign bodies in the eye, which it may or may not be possible to locate with the X-ray, I shall not stop to consider, as it would take more time to consider that one phase of the subject than is available for this paper. Sometimes the vitreous is so full of fine opacities that it is impossible to see the fundus. The view may be further interfered with by pathologic conditions anterior to the vitreous in the lens, aqueous or cornea, or posteriorly by pus, tumors or exudates.

All patients presenting opacities of the vitreous should be thoroughly refracted, preferably under atropin, unless there is some special contraindication, to discover if there is any error; if so, its nature and extent. Frequently there will be found serious defects which have existed for a long time and were unsuspected by them. The most serious form of ametropia in relation to hyalitis is myopia of high degree, and myopic choroiditis and fluidity of the vitreous. These patients should be accurately fitted for near and distant vision, and cautioned to avoid overuse of the eyes, as they are in imminent danger of detachment of the retina. These cases of synchysis greatly complicate the extraction of cataracts. All cases should not only have their errors of refraction corrected for near and far vision, as indicated, but should have ultra violet ray

protection for the retina, if exposed very much to the bright sunlight or artificial light.

Hemorrhages into the vitreous result from traumatism or bleeding from the ciliary body, retina or choroid, as the result of diseased conditions, the blood penetrating the hyaloid membrane and mixing with the vitreous humor to a greater or less extent, depending on the amount of hemorrhage and the consistency of the vitreous. These extravasations of blood frequently occur at the time of puberty, adolescence, menopause and during senility with atheromatous conditions of the arteries, as well as in nephritis, diabetes, syphilis, and anemia, the latter frequently also meaning a condition of lessened coagulability, the same as we often encounter in anemic conditions accompanying diseased tonsils and adenoids, where, upon their removal, hemorrhage continues for a long time, without the slightest tendency to clot, instead of the normal period of three to five minutes.

The patient should be placed in bed, when practicable, and given morphine to reduce the blood pressure (avoiding adrenalin). Salines in laxative doses given for a long time, so as to avoid any necessity for straining. The eyes protected from light and any unnecessary use. The blood should be thoroughly examined and Bland's carbonate of iron pills given when indicated, and active antileuëtic treatment instituted when justified by the clinical or laboratory findings. Iodid of potassium meets the double indication of increased pressure and absorption of the clots. In glaucomatous conditions eserine is advisable, as operation usually spells loss of the eye from further extensive hemorrhage. In recurrent hemorrhages, chlorid of calcium should be given for a prolonged period, as lime is absolutely essential to bring about coagulation of the blood. (In robust subjects, the application of leeches to the temple).

Crystals of cholestrin, tyrosin and phosphates occur in the vitreous humor, and are known as synchysis scintillans, and appear as innumerable bright specks upon ophthalmoscopic examination. They no doubt are the product of faulty pancreatic and hepatic metabolism. I have not observed that they interfere with vision, and there is no known remedy for them. Perforating injuries of the vitreous with the introduction of infection, resulting in suppuration, usually call for enucleation to forestall sympathetic ophthalmitis. Retained foreign bodies almost invariably result in atrophy of the globe or suppuration, hence should be subjected to attempted removal at least, as a precautionary measure.

Nasal accessory sinus disease, infections of the tonsils and adenoids, and pyorrhea and



abscessed roots of teeth, and, in fact, any focal infection, may secondarily cause disease of the nerves, lymphatic and blood vessels of the eyes, and result in vitreous opacities. Accordingly, they should all be subjected to a thorough examination and proper surgical measures resorted to in order to relieve the condition.

The inflammations of the ciliary body, retina and choroid, accompanied by exudates and vitreous opacities, should be treated by the instillation of atropin, iodine, iodid of potassium, laxatives, sweats with pilocarpin, and Turkish baths, protection from too bright illumination from the sun or artificial lights, subconjunctival injections of cyanid of mercury or normal salt solution, diuretics (of which acetate of potash is one of the best), iron, quinin and strychnin, to improve the blood and general nutrition. Many patients will require a prolonged course of treatment, extending over several months or years, before the opacities in the vitreous are entirely removed, and some do not disappear under any treatment.

### Discussion

*Dr. R. O. Early, Oklahoma City:* I am in the position of Dr. McHenry. This is the first I have heard of this paper. I thought maybe Dr. Cook was writing it this morning and that was the reason I had not received a copy of it.

Vitreous opacities are a good deal of a bugbear to the oculist as well as the patient. They are common. I didn't know they were so common as the number of cases Dr. Cook gave. The character of these opacities will lead us to get at the cause, sometimes. I believe that those dust-like opacities that we see are found more often in syphilitic conditions and the larger dots and shreds and plates we see are more often due to hemorrhage and inflammation of the retina and choroid and ciliary bodies. In the examination of these opacities, especially those faint ones, I think that the use of a plain mirror will give better results than the other, especially with a diminished light. The prognoses in these cases are not very satisfactory. I think the cases we get the best results from are those cases that are probably due to syphilis when seen early and given anti-syphilitic treatment, with mercury. There is another cause, of course, intense myopia, we see it in some cases. A proper refraction may be of some help in those cases. One of the worst cases I ever saw was a highly neurotic woman with no other apparent cause than an intense myopia. Dr. Cook has outlined the treatment of these cases as well as can be outlined. They are unsatisfactory at best.

*Dr. W. T. Salmon, Oklahoma City:* I wondered what Dr. Cook was going to say

about these conditions and I want to let Dr. Cook know how much I appreciated a paper on such a subject; one that very few doctors would choose as one that would be interesting to a body like this and I am truly glad to have heard it.

Except in pathological conditions where there might be choroiditis or hemorrhagic trouble, or what not, those cases are easily diagnosed sometimes and it is easy to convince the patients that they have something the matter with them, but those cases of *muscae volitantes*,—objects passing before the eye—are sometimes annoying to the physician. They are convinced that there is something seriously wrong with them which might sometimes terminate in death, and we are convinced that it is nothing serious which they will not recover from and we are always glad to get rid of those kind of patients.

There are two things Dr. Cook failed to mention that the patient tells you caused these spots: One of them is the sun spot—sun shining too hard and too directly—and another is the liver spot. I have those patients sometimes. I don't know what the doctor uses in those cases and usually the only thing I can suggest is to remove the sun or, on the other hand, the liver, or remove your patient to the sea coast and get rid of him.

The anti-syphilitic treatment Dr. Early speaks of is a remedy that is used in syphilitic conditions, but in syphilitic conditions we have what is known as and they describe it as falling of gold—showers of gold—and if I had that condition and I could see gold falling every day, I don't know whether I would want anybody to relieve me of it because that would be the only way that I would ever see it. Blue mass is always indicated and I use it.

I thank Dr. Cook very much for presenting this paper.

*Dr. C. B. Barker, Guthrie:* I am wondering if the age of the patient didn't have a good deal to do as to how much benefit we get from the drugs. Regardless of age, treatment or anything that particular experience has indicated. My experience is young people will improve from this condition quite readily while those who are old, their whole body is just like their eyes. They go from bad to worse.

*Dr. E. S. Ferguson, Oklahoma City:* Dr. Cook always writes a good paper and we always get something from it. I enjoyed it very much. The question of vitreous opacities we come in contact with take on two phases; that is, those with the actual opacities which I suppose he means in his paper, and those of the transitory opacities such as the cell shadows and types of that kind coming on from excesses. Probably the one Dr. Salmon spoke of here as not

mentioned, the liver spots, disturbances of the function of glands of the body or things of that type which give you, apparently, vitreous opacities when the most careful search fails to locate them, those, I expect, should be eliminated entirely from discussion in this paper because they are not opacities so far as we are able to determine.

The opacities of syphilitic origin, I think, are amenable to treatment more than any other type we have. The opacities that come from exudates from choroid or exudates from the retina, hemorrhages, etc., in my experience, are difficult to handle and practically never disappear. I think it is possible to have a fresh hemorrhage absorbed so that it leaves no opacities if it is small, but if those spots are dense and become organized as vitreous opacities, I have failed to relieve them by any method I have been using in the past.

The type of cases that was spoken of that are really not 'definite' opacities such as correction of errors of refraction and so forth, are, of course, easy to handle in a great many instances. The myopic cases that Dr. Early mentioned a while ago frequently are definite exudates from choroidal stretching. Those cases are almost impossible to relieve. The treatment of these cases, of course, should depend on the cause and effort made in all of them to relieve by absorption whether iodine, iodid potassium, mercury or whatever it may be. They are annoying not only to the patient, but extremely difficult to handle by the physician.

*Dr. M. K. Thompson, Muskogee:* The cases that bother me mostly are these of recurrent hemorrhages. I have two cases that have come under my observation from time to time, recurrent hemorrhages and afterwards the loss of an eye. It is just a question of what I want to do. In one case I advised an operation for glaucoma regardless of the fact that he has had a hemorrhage and was suffering very much with the glaucoma. He refused it and that may have been the proper thing, although he is totally blind in that eye, not as a result of the hemorrhage, but as a result of the glaucoma. He is having recurrent hemorrhage in the other eye. As long as he will take care of himself and leave off corn and take care of his general health, he rests fairly well and doesn't have any trouble; then getting a little bit careless with his mode of living, he will have another hemorrhage, sometimes small and sometimes large. As I tell him, he is a man of about forty-five, he is going to lose that other eye some day just as sure as he lives, from recurrent hemorrhages. What is to be done under those circumstances? The Wassermann is negative. He is about forty-five.

*A Member:* What is the blood pressure?

*Dr. Thompson:* The blood is normal. This man has been under treatment and under observation by such men as Weeks and men up around New York and Philadelphia, but he has those recurrent attacks very frequently. I have had several of those cases. I have a patient at Okmulgee that is totally blind now, however, she never did have the glaucoma, at least while I had occasion to see her. But she has a cataract on the eye and has had recurrent hemorrhages. She wanted the cataract removed.

*A Member:* What is the coagulation test, Doctor?

*Dr. Thompson:* I do not know that. It has been some time since I have seen her. She wants that cataract removed and I doubt whether it would do any good I have advised it would not. Those opacities give me the most trouble. Of course these they see that follow them around and the causes have been explained in different ways by different authorities, but they do not bother near as much as these that have actually happened and put the eyes out.

*Dr. Cook—Closing:* I wrote this paper to see if I couldn't get some pointers from the discussion that might be of benefit to me and I expect to receive benefit more than give any in this particular line, but these cases, some are unusually obstinate. Many cases now are these temporary floaters that people complain about, those that notice them for a very short time. My treatment is to give these cases a thorough purge with calomel and then continue a saline laxative daily for some time following that and very many will clear up, especially where they are caused from hepatic disturbances. Of course, age of the patient has a great deal to do with the results. They are more satisfactory in the young cases, of course, than in the older cases. About as unsatisfactory as any case we have are those with the high degree of myopia in which cases the improvement is usually less than in practically any others. The case Dr. Thompson spoke of complicated with glaucoma and cataract, I think the best treatment for those is to enucleate the eye right away, because you are liable to get more or less sympathetic trouble by letting it remain there and if there is anything unsatisfactory we attempt to do it is to attempt to remove a cataract from a glaucomatous eye, especially with an involvement of the vitreous also.

As the result of examination of about 400 samples of milk taken from the first day to the seventeenth month of lactation, Warren R. Sisson and W. Denis, Boston (*Journal A. M. A.*, Aug. 28, 1920), found that after the first week, during which slightly higher figures prevail, the average chlorid content of breast milk varies but little, being about 50 mg. per hundred c.c. of milk. The authors feel that this diet is not the essential cause in the variation in the chlorin content, and that some other factor must play an important part.



## FOCAL INFECTION\*

C. B. BARKER, A. M., M. D.  
GUTHRIE, OKLA.

Since focal infection was brought to our notice some twelve or fifteen years ago, there has been a great deal written and many experiments, and like everything else, when new, we had no rules to govern us and perhaps some harm has been done.

The history of medicine reveals the fact that practitioners are prone to refer the causation of ill defined diseases to the latest and most fashionable of origins, at present it seems to be focal infection, in another ten years, we may have something else.

By focal infection, we mean infection, which enter the body from one or more sources, such as the alimentary canal, urinary tract, sinuses, alveolar processes and the tonsils. The ones we are the most interested in are the sinuses, tonsils and teeth. Without a doubt there has been some good teeth and tonsils removed and normal sinuses opened, with no benefit derived, proven by number of patients seeking relief who have had this done, but since the caloric and galvanic tests, the roentgen ray and suction have been developed to such a state of efficiency there are fewer mistakes made than formerly.

In regard to the tonsil, I know of no definite method of always telling the exact condition, however, the history, inspection, suction and a blood examination will help to form a fairly accurate opinion, although I have found pockets of pus in tonsils after they were removed, which looked very innocent in the throat. Some pathologists feel that they have proven that the streptococcus is never found in the tonsil, while others say they are always found there, be that as it may, we are all of the same opinion, I think, that some forms of rheumatism are very much benefited by the removal of a pair of infected tonsils, especially is this true of rheumatic trouble up to forty years of age, in later life, the chronic conditions do not seem to respond as readily. Likewise, there are many cases of neuritis benefited by the removal of a pair of diseased tonsils, a bad tooth or cleansing a sinus.

I have had two cases of scleritis which had had the routine treatment for this trouble and both cases had lasted over a year and did not clear up until after their tonsils had been removed. This does not prove that scleritis is always caused from tonsils, but it is apparent that such a condition may exist.

It has been known for years that asthma, associated with nasal polypi, is generally relieved by removing polypi from the nose and

draining the sinuses, and I believe every man in this section could tell of cases, which would corroborate this statement. We have also had cases of chronic headache relieved by cleansing one or more sinuses, or extracting a diseased tooth or root, but I think this is less frequent of tonsils.

As to the teeth causing trouble the most pronounced cases are in individuals, who pay no attention to the sanitary condition of their mouth and the acute cases of iritis were associated with pronounced diseased alveolar processes and an unsanitary condition of the mouth as a whole, and the teeth affected the most were on the same side as the diseased eye. Whether this was a coincidence or whether the venous connection is closer on the same side and could account for it, I do not know. To illustrate the acute condition, I have had three cataract cases, about two months after the operation, develop an irido-cyclitis associated with severe pain and lowering of the vision of shadows, the routine treatment for the condition had no effect and morphine did not control the pain, enucleation was considered, but after removal of some infected teeth near the canine fossa, the eye became normal in a very short time, and has so remained. Also two cases of diplopia have come under my observation which cleared up after the removal of diseased teeth. In chronic cases there is generally some attention paid to the care of the mouth, and the condition is not so destructive, and tends to yield to ordinary treatment, but relapses recur, and the source of the trouble is generally discovered with an X-ray.

In summing up, I would say, that when a patient presents himself, it is a good routine to begin at the top of the head and examine downward, including a blood examination and X-ray and tabulate everything that could cause the disease at hand, and remove only those factors, which can definitely be proven to have a bearing on the disease. I have found that good elimination and hot bath should follow the removal of the source of infection.

## Discussion

*Dr. E. S. Ferguson, Oklahoma City: (Eye Phase)* There is no question in my mind but what a great many of the inflammatory conditions present in the eyes are due to focal infection or general infections from focal origin. I don't know whether physicians are more prone to ride hobbies than any other class of people or not. I think we have our full share of that particular characteristic. We are inclined to look narrowly at diseased conditions following some demonstrations, as we think, that lead us to believe that a certain disease was caused from a certain thing. The next time we get the same condition or a similar condition we

\*Read at 29th Annual Meeting, Section on Eye, Ear, Nose and Throat, McAlester, May 18, 1921.



rather expect to find the same cause. I don't know whether the eye men are any more prone to that than the other branches of medicine but we are apt to run these hobbies to death.

I thoroughly believe that there have been hundreds and thousands of cases where the tonsils and the teeth have been sacrificed believing that they were the cause of inflammatory conditions of the eye that might better have been left alone. We may take the stand that it is better to take out fifty tonsils and get twenty that are the cause of trouble than to leave them all alone and have those twenty to blame. I have been disappointed in the results obtained from the removal of tonsils for certain inflammatory conditions of the eye as well as I have been disappointed in the removal of the teeth for the same conditions. I do not believe that we are able to discriminate between the tonsil which is the seat of infection and the tonsil which is not in a great many cases. We are all guilty, probably, of taking an aspirator or a suction or a probe or some other instrument and investigating these tonsils and get a little milky secretion from the tonsil and deciding in our mind that that is pus and it is an infection that should be gotten rid of. I will guarantee that any man in this house can take almost any tonsil and get that same secretion from it, whether that tonsil be diseased or not diseased so far as we are able to tell.

As to the particular organism that is more apt to produce the condition in the tonsils or in the teeth or some other point, it is always a question. We had a very interesting study, bacteriologically, of 100 consecutive tonsils that were removed in one of our local hospitals in Oklahoma City, by Dr. Turley of Norman, last year. From the report he gives of these cases—in that run of cases,—we were just about as much at sea after we had that report as we were before, of the cases that were apt to produce trouble and those that would not, as they all, or, practically all, showed some infection.

The doctor spoke about the streptococcus being rarely found in the tonsil, or, according to some investigators, rarely found. Dr. Turley reported several cases in which the streptococcus was found. He reported a few tubercle bacilli were found in the tonsils and a few cases—I have forgotten the number—where tuberculous tissue was found, which would be most positive evidence of tuberculous infection of the tonsil because, I believe it is possible to have tubercle bacilli in tonsils which would be comparatively healthful and would not be of any significance so far as the tubercular disease was concerned.

There is no question in my mind but what we get a certain number of cases of inflamma-

tory conditions of the eye from focal infection. Particularly is that true of iritis and of papillitis or neuritis.

The cases of scleritis are spoken of by Dr. Barker here. Scleritis, I believe most all of us have come to believe, is a type of trouble similar to what we are pleased to call rheumatism; in other words, it is an infectious process to begin with and the scleritis would be relieved by removing the cause of the infection which produces the inflammatory condition, whether it be teeth tonsils or what not. One thing I think we all should bear in mind and that is this: That we are all sacrificing teeth, tonsils and other parts that are liable to lead us to believe that they may be infected because probably we think that it will do no particular harm to remove them. I have a number of cases that I would much prefer that the teeth had not been removed. I have a number of cases where, if it was within my power to do so, I would replace the tonsils, because the patients have been very materially injured by their removal, so far as their feelings and general condition is concerned. This is a question that we could discuss and cuss, if you will, for an unlimited time without getting us any place. There is no question but what a thorough study of the blood should be made in all cases where we suspect we have a focal infection. If the blood shows no general infection, then I think we should hesitate, before promising at least, that we would relieve a certain condition by removing a part that we supposed was infected locally. I believe, probably, that we will arrive at a more sane method of determining the exact focal infections in the future. We must do it if we expect to get the best results.

*Dr. D. D. McHenry*, Oklahoma City—(Throat Phase) Dr. Ferguson has very thoroughly covered the question of tonsils and teeth. I have had some experiences very similar to what his has been. A few patients—a very few, however—that have an irritation or inflammation of the posterior wall of the pharynx following as good tonsillectomy as I ever did which is very disagreeable to them. That is one side. I only have a few of those compared to quite a large number who are highly satisfied.

I think, as Dr. Ferguson says, that in a very, very high percentage of cases, probably ninety to ninety-five per cent—and I made that statement in our county society not long ago and was emphatically contradicted—I think in these ninety to ninety-five per cents we can squeeze what we have been calling pus out of that high a percentage of tonsils. I have always been calling these cases "infected tonsils". Dr. Ferguson should have gone a little further and said that in all of these hundred cases of tonsils that Dr. Turley examined he found infection

in all of them. Infection, as he called it "more than the worst sewer water that we have. Higher percentage of bacteria in the substance of these tonsils than we have in our worst sewers." I think those were the words that he used, as I remember. Those of you who attended last year's meeting remember we had him talk on the subject in this section.

I do not think all those tonsils should be removed. That is altogether too radical surgery, to remove all from which you can squeeze so-called pus. However, less than sixty days ago a leading general practitioner of our town said that all patients over forty years of age should have their tonsils removed. That is too radical, in my opinion. However, we have all seen the results of focal infections very materially increased by the removal of the focus. I have in mind at present a young woman that came into my office one afternoon saying she could not see well out of one eye. She said she had noticed it the day before. I found a vision of 29-40's or 50's in that eye and 20-20's in the other. In that eye we had what we term the wooly condition or beginning of optic neuritis. I put her on treatment—don't remember what—and told her to see me the next day. The next day it was worse than before. The other eye was very nearly as bad as the first affected eye had been the previous day. I sent her to the X-ray and Dr. Roland examined her and 'phoned back and said "she has infection in those teeth enough to kill forty mules." I think those were the words he used. The next morning we removed several teeth—I forget how many—This woman had begged the dentist two years before to remove the teeth instead of saving them. She recovered but the first eye never got a vision better than 20-40's and the other came back to normal. That is probably one of the most obvious cases I have seen.

We have all seen neuritis and especially the scleritis of which the doctor tells us. Our old text books called it rheumatic. And we have all seen those clear up when we got rid of the focus of infection and certainly we should look to our sinuses in hunting the focus and certainly we should be very careful in not over-riding the hobby and I dare say there isn't one of you but has a patient at least one a week come into your office and say "Dr. so and so says to take all my teeth out". You find one or two devitalized teeth and the rest good. Certainly it is almost mal-practice to tell them to remove good teeth because several are bad. The thing for us to do is to use conservative, common sense in doctoring all these cases of focal infection. This is surely a subject that needs a great deal of study and a great deal of thorough, common sense to handle and handle it properly.

*Dr. Daniel Wm. Miller, Blackwell:* I have been very much interested in this paper and I want to thank Dr. Barker for it. I have also been very much interested in the discussion. I think as physicians we should be very careful in running to seed in one particular direction or, in other words, losing our better judgment with reference to the causes of these various diseases. There is no question but what focal infection accounts for a great many disorders found most everywhere or most anywhere in the body. But I think that in looking for these causes we should go into a case as thoroughly as possible, using every method possible to arrive at a true diagnosis as to the cause of the trouble and not remove teeth or remove the tonsils but try to determine, if possible, whether the trouble is in the teeth and which teeth and I think in these cases we should have an X-ray made of the teeth because, often-times, one tooth may account for the whole trouble and it is a very serious matter, indeed, to extract a mouthful of good teeth just in order possibly to get one tooth that may be at the bottom of the trouble and possibly not even then finding any tooth that accounts for the infection. However, I think that this matter of focal infection has been a great advance in the practice of medicine and especially the practice of our specialty. I know instances in which just the one tooth accounted for a great deal of trouble. For instance, I want to relate one case—and I could relate many cases that will bear upon this subject—but this case is of a doctor. He had an ulcer on the right eye located between the pupil and periphery, three years ago last September. It occurred by a little accident, being out in the country and the roads were bad and he got the eye injured by sand and mud being thrown into it from his car which resulted in an ulcer which was very intractable. I treated the case and after the ulcer was apparently healed, there was no inflammatory condition and neuritis seemed to persist and it was about three months before we finally got rid of the condition. Next September about the same thing occurred and we had an ulcer again in the same eye. I treated the case for some time and finally he went to Kansas City to an ophthalmologist and they put him in the hospital, kept him there awhile and pronounced the condition a cold ulcer. Finally he turned him back to Blackwell in about the same condition as when he left. I treated the case again and in the first instance as well as in this instance I made inquiry as to the condition of the teeth and advised him to have an X-ray made. He said he didn't have a bad tooth in his head had no trouble whatever, but finally he went to a dentist and he said there was no trouble. Finally I sent him to a dentist

with an X-ray—a capable man—and he looked into his mouth and got the history of the case and said it wasn't necessary to have an X-ray. "You have a bad tooth; first bicuspid on the right." He extracted the first bicuspid and there was the sac at the bottom of the tooth about twice the size of a grain of wheat. In two weeks time he was cured. That was two years ago and he has had no more trouble. I just mention that one case.

I think this paper ought to be considered with the intention in mind for which it was presented; that we ought not to jump at conclusions but that we ought to look carefully into the history of each individual case and try to arrive at a proper diagnosis before advising any method of treatment.

*Dr. Barker* — Closing: I hoped that we would arrive at some definite conclusion. Dr. Salmon said that there were too many varied opinions as to whether patient had adenoids and tonsils, and this should not occur because it makes people afraid of specialists.

In regard to the X-rays, I think there should be two views taken—at least two. You might show a disease of the alveolar process in one view and taken at another angle it wouldn't show.

In those teeth that are diseased, you can tap them on one side and they will produce no pain, tap them on the end there will be severe pain in many of them. I thank you for the liberal discussion.

#### PROCEEDINGS OF OKLAHOMA CITY CLINIC, ROUND TABLE, WESLEY HOSPITAL.

**Dr. A. L. Blesh:** *Goitre, Massive, Congenital Hypo-thyroidism.*

Case No. 7538, female, 14 years old, referred by Dr. Baker, with the following history.

At a year of age mother first noticed an enlargement, centrally situated in the thyroid region. This continued slowly to enlarge. At nine years of age it was operated upon in an adjoining city. A year later the parents noted that the growth had returned and was enlarging. Within the last eight months growth has been very rapid.

**Physical Examination:** The child is under developed physically, corresponding in size and physical development to a nine year old girl, but mentally she is quite alert and learns readily. Her hair is coarse and skin inclined to dryness. Sexual development, that of an infant. Otherwise physically negative, except for an enormous lobulated goitre almost as large as a standard foot-ball. Across this mass coursed enormously distended veins.

**Diagnosis:** Goitre congenital, simple with moderate hypo-thyroidism. Surgical advice, thyroidectomy, with glandular treatment.

**Operation:** Tumor enucleated in several separate lobules between which lay a compressed stroma consisting of connective tissue and thinned out thyroid tissue. The tumor was thus enucleated in order that the remnants of thyroid would be saved since the patient is already a hypo-thyroid.

The operation was accomplished without special difficulty except for hemorrhage which was hard to control because of the manner of nodular enucleation. To have removed the tumor en-masse would have been simpler surgery, but would have led to the sacrifice of much needed thyroid tissue.

The patient made a perfectly smooth surgical convalescence and was discharged from the hospital in eleven days. While in the Hospital Dr. Paulus worked out the necessary amount of thyroid dosage to make up the deficiency and she is now under the care of Dr. Baker.

**Remarks:** Our experience in goitre work has been comparatively large, situated as we are out of the goitre belt, and this is the youngest patient so far observed in our Clinic. She is also, of course, the youngest thyroidectomized patient. The anticipated dangers were not surgical, but had to do with the preservation of the utmost possible amount of thyroid parenchyma. The type of operation was planned after the exposure of the gland with this object in view.

Microscopical studies are now being made in the Laboratory.

**Dr. W. W. Rucks:** *Bante's Disease.*

Case 7243, male, age 28, automobile mechanic, brought to us on May 14, 1921, by Dr. Kiles of Konawa, Oklahoma.

Family history is entirely negative. Personal history is that of a healthy child and young man. He had measles, mumps and whooping cough during childhood, and "slow fever" at the age of 19. Sick about five weeks. From all these he made good and uneventful recoveries.

History shows no further disturbance until 1917, while in training at Camp Travis had a fall from motor cycle, and was in hospital four weeks, no bones were broken and there seemed to be no special injury, but he felt badly and was weak, and because of his lack of physical strength was not permitted to go to France with the 90th. Division. Later he was in Government hospital at New Orleans for a period of two months. At that time he felt drowsy, fainted easily, and his endurance was greatly diminished. Improved some and was discharged from Army. For a period of eight months after discharge he felt pretty well.



Then he began to lose weight, felt drowsy and exhausts easily, very much as he did while in hospital at New Orleans. Was examined for hook-worm, both at Camp Travis and New Orleans and found negative. Also had negative Wassermann. In addition to his drowsy exhausted feeling he has had for some time a feeling of fullness in his upper abdomen. Says his belt is quite uncomfortable but he has no especial pain or discomfort with reference to meals.

On April 3, 1921 begun to feel unusually dizzy and faint, became nauseated and vomited a large amount of blood. Had no pain, only weakness and nausea. This hemorrhage greatly increased his weakness and on May 14, 1921 he was brought to our Clinic for examination.

Physical examination revealed a pale anemic young man, blond type. Pupils rather widely dilated, respond sluggishly to light. Defective hearing in right ear. Obstruction in right nostril. Much dental work, and stubs of tonsils. Glands in neck slightly enlarged, no other adenopathy. Lungs entirely negative. Heart negative except for faint blowing sound heard at apex which is believed to be haemic in character. Abdominal palpation reveals a mass extending from beneath the ribs on the left side to crest of ileum and to within an inch of the umbilicus. This mass is believed to be the spleen. Liver normal in size. Extremities negative. Blood pressure 120-70. Blood count: leucocytes 3000, red blood cells 3,960,000. Hemoglobin percent 80. Smear shows a slight difference in size of red cells. Not enough white cells could be found in two slides to make a differential.

Here we have a young man suffering from anemia with the physical finding of a very large spleen. Anemia is characteristic of many conditions in which the spleen is enlarged, especially the primary anemia, as leukemia and pernicious anemia. Secondary anemia accompanies splenic enlargement in Hodgkins disease, chronic malaria, and various forms of hepatic cirrhosis. In splenic anemia or Bante's disease the spleen is very large, there is marked anemia of secondary type. Hemorrhage particularly hematemesis are common. Purpura and edema of the extremities are common. The cause is very chronic. Bante's disease occurs in adolescence or early adult life. This man is 28 years of age. He has a primary splenomegaly with secondary anemia, and absence of enlargement of lymphnodes upon which a direct diagnosis of Bante's disease could be made. In addition he has had hematemesis. Absence of lymphnodes differentiates it from Hodgkins disease. And the blood picture from pernicious anemia and leukemia.

A diagnosis in this case of Banti's disease seems justifiable. The man being a discharged soldier was advised to seek treatment in a government hospital. This he did without success. He then went to the Mayo Clinic where a diagnosis of Bante's disease was made and splenectomy offered if he wished it, but no hope of benefit was promised. He returned to his home and I am informed by Dr. Kiles that he continues to have severe hematemesis and that he is now in extremes.

#### **Dr. M. E. Stout: Bone Graft in Crushed Body of Lumbar Vertebra with Deformity.**

Mr. T. Case No. 7540, age 44, Lineman for Telephone Company.

On April 13, 1921, he was accidentally jerked from the top of a telephone pole, falling a distance of seventeen feet, landing on his back. He suffered severe pain in dorso-lumbar region immediately after injury. No immediate paralysis. No urinary disturbance, but he has considerable pain in his right leg which required morphine for relief on several occasions. Was in bed for three weeks. Since then he has been able to get around on crutches, but still suffers considerable pain over injured area of back. Exercise soon tires the spine, which is relieved by lying down, or supporting himself on crutches.

The physical examination is negative except for spine which shows a posterior buckling at the first lumbar vertebra, with slight lateral deviation of spinous processes to the right.

The X-ray shows a crushed body of the first lumbar vertebra with buckling and lateral deviation. Laboratory findings of blood and urine were negative.

On June 23, 1921, a six inch graft was taken from the crest of the tibia and transplanted to the spinous processes of the vertebra over the point of injury. The patient was kept in bed flat on his back for six weeks. Both wounds healed primarily, and at the end of six weeks an X-ray showed the graft in excellent position, and to be strongly united. At this time a light plaster jacket was applied, and the patient was permitted to be up and returned home.

The pain was completely relieved and the patient reported to-day by 'phone that he is gaining strength rapidly, is free from pain, and in excellent health.

#### **A DENTAL CLINIC FOR CHILDREN IN A SETTLEMENT**

The first dental clinic for children in a settlement was established in the New Orleans Dispensary for Women and Children. The clinic is caring for 1,500 children. The report made by Haidee Weeks Guthrie, New Orleans (*Journal A. M. A.*, Nov. 6, 1920) is based on the case records of more than 8,000 children. So far as the social workers connected with the clinic were able to observe them, a marked reduction in the number of cases of infectious diseases occurred in the children who "belonged" to the clinic. There has not been an epidemic in the neighborhood since the clinic was started.

# PROCEEDINGS OF UNIVERSITY HOSPITAL CLINICAL SOCIETY

**Dr. Lea Riely:** *Diabetes Insipidus or Hypophyseal Polyuria.*

White male: 34 yrs., single, occupation, cowboy, cavalry soldier, and a mounted policeman. Presents himself with the following symptoms: Pain in mid-epigastrium, ringing in the right ear, pain in the lower back, frontal headache, polyuria. Got an S. C. D. 1918 from the U. S. Army account of polyuria. Gave the following history.

Present illness: In August, 1917, while shoeing a mule, the mule fell on him, injuring his back and head; was stunned a moment but went on shoeing the animal. In November 1917 he began to have nocturnal-polyuria, restless nights, and his libido diminished. Passed large quantities of pale urine, having nocturia 4 to 5 times, and hourly during the day. Twenty-four hour output was 8 or 9 quarts. The pain in the mid-epigastrium was not related to meals. It had slight radiation to the right quadrant and was relieved only by opiates. Pain in the lumbar region while riding horseback and after exertion of any kind. Buzzing and ringing in the right ear has been almost constant for the last two years. Thinks he has had some blood in the stools usually bright red and usually after the passage of a hard stool.

No history of any mental shock or scare, but has been knocked unconscious two or three times by falling horses.

Past History: Habits: Drank only in moderation. Had measles, mumps and chicken pox. Chills and fever in 1903 and 1909. When enlisted in the army weighed 130 lbs. Present weight 182 lbs.

Physical Examination: Short, obese male with red face and neck, not due to exposure or external influences. Skin of the face has a red blush. Deeper skin structures feel slightly thickened and indurated. Hair on the scalp is fine, and red, and has central alopecia. Hair of body one or two inches long over chest and back and extending onto the upper arms. It diminishes in amount as the girdle line is approached. Suprapubic hair has masculine distribution. Legs are moderately free from hair. Structural conformity resembles female in a few characteristics especially the graceful angle of the thigh. The anterior rounded appearance is produced by the flexors of the thigh. Abdomen is pendulous resembling a Froehlich's type of dystrophy adiposo genitalis. Hands are very pudgy and dwarfed.

Measurements: Acromion to ant. superior spine is 49cm. Ant. sup. spine to floor is 86 cm. Head is rounded, no bony abnormal-

ities, central alopecia, rather large skull. Eyes are small in comparison with size of skull, react to light and accommodation. Vision is diminished in acuity, no nystagmus. No hemianopsia. Head is short and well set on shoulders. Supraclavicular and suprascapular pads of fat. Thyroid is negative. Heart and lungs negative. Vessels not thickened. Blood pressure is 114-70. Pulse good volume, regular and well sustained. Left testicle is large and there is only one in the scrotum. Right testicle palpated in the inguinal cana near the site of the internal ring, moderately tender to palpation. Gastrointestinal X-ray was negative. X-ray of skull negative about the sella. P. S. P. first hour 8%, second hour 10%. Blood chemistry, N. P. N. 34.5 mgms per 100cc.; urea nitrogen 18.3 mgms per 100 cc. blood; uric acid 4.3 mgms per 100cc. Sugar tolerance test showed 90 mgms one hour after ingestion of 100 gms glucose, and 211 mgms blood sugar two hours after ingestion. Ewald fractional test meal: Combined acid 3, free hydrochloric acid none.

Twenty minute periods showed:

combined	21.5	and free	HCl	of none
"	54.5	"	"	15.
"	46.0	"	"	16.5
"	54.5	"	"	28.
"	46.5	"	"	26.
"	48.0	"	"	18.
"	16.5	"	"	00.0

## Discussion

Clinically the direct relation of diabetes insipidus and the pituitary body was first brought out by Frank in 1912. Its association with findings indicative of hypophyseal disease has also been observed such as bitemporal hemianopsia, dystrophy adiposo genitalis, infantilism, and tumors of various kinds, including metastases actually involving the gland or its immediate neighborhood, and more recently atrophy and congenital hypoplasia of the hypophysis. In no case has the hypophysis been found normal at autopsy. The physiologists claim that the hypophysectomy without the disturbance of the pars intermedia or adjacent structures are not productive of polyuria.—Camus and Roussy. Maranon claims that the syndrome is in at least a large majority of the cases a consequence of the posterior lobe of the hypophysis. Barker, Cushing; and other clinicians think that the hypophysis must be regarded as the central regulator of the kidney function, and that diabetes insipidus is the result of the lessened secretion of the pars intermedia. Barker says that pituitary therapy has as specific an effect on these cases as does opium on pain. The above case with the adjoining scheme of liquid ingestion and urinary output would verify this statement.



The dose has to be regulated with precision as it shows in this case that a hypodermic of  $\frac{1}{2}$  cc. twice a day upset the good effects of the previous dosages of  $\frac{1}{4}$  cc. twice daily, and that the urinary output began to increase. When the dosage was reduced to  $\frac{1}{4}$  cc. twice daily again the output began to diminish again. Reasoning by analogy in this case one would question whether or not that Allen's paradoxical law as related to the pancreas might not be applied to the pituitary also. Experimenters claim that you can not bring the urinary output below normal in these cases. A peculiar observation in this case was a nocturnal glycosuria on three successive days occurring after going to a "round-up" of cowboy sports and drinking only one bottle of coca-cola aside from his observed hospital diet. The urinary output diminished until there was only 790 cc. of urine in 24 hours and then the pituitrin was left off. Within two days the output had increased to 5000 cc. To show the quick effects he made an observation at 6 a. m. the patient passing 395 cc. at 7 a. m., 180 cc.; at 8 a. m., 110 cc.; One half cc. of pituitrin was given at 8 a. m. Patient then urinated following amounts: 9 a. m., 60 cc.; at 10 a. m., 50 cc.; at 11 a. m., 40 cc.; at 12 noon, 60 cc.

**Dr. C. E. Clymer:** *Carcinoma of Naso-Pharynx with Extension.*

Case No. 14169. Age 40; male; white; married; American.

Present illness: Patient was admitted to the State University Hospital for the first time August 24, 1921, complaining of pain and a growth in the right side of the neck. The patient first noticed pain in the right side of head one year ago. About one month later a small hard nodule appeared at the angle of the left lower jaw. His doctor gave him aspirin which failed to give relief. About six weeks from the onset the nodule was removed, but the doctor made no statement as to its character. The mass soon appeared again and has gradually increased in size until it reached its present condition. It began to affect his speech and he has not been able to speak above a whisper since six months ago. He was treated for syphilis for over a month, five months ago, with no apparent relief. He had X-ray treatment three months ago, which caused the mass to diminish in size for a time, but did not give permanent relief. He went to the Mayo Brothers two months ago who told him he had an inoperable cancer of the naso-pharynx.

Now he suffers from constant severe pain and has difficulty in swallowing. He expectorates profusely, and the sputum is mucoid in character.

Past History: Negative except for typhoid and pneumonia. He was operated 27 months ago following a blow on the head, for mastoid trouble. He has been deaf since the operation, in the right ear.

He denies venereal disease.

Family History: Not important. No T. B. or cancer.

Physical Examination: A large well developed, poorly nourished, white pale man about forty years old, mentally clear but apparently suffering from considerable pain.

There is a large, deeply attached, immovable, tender, infiltrating mass at the angle of the right lower jaw. The skin moves freely over the mass. Heat normal. Skull, scalp, external ears, nose, are negative.

Eyes: The left pupil is larger than the right. Both pupils are regular and react to light and distance.

There is moderate exophthalmos of the right eye. Otherwise the eyes are normal.

Mouth: Teeth; full set, clean and in good condition. Patient is unable to open mouth over three eighths of an inch. Pharynx and larynx not examined, because of the inability to open the mouth.

There is a small palpable nodule in the left posterior cervical region also a small tumor mass in the lower portion of the sternum. Otherwise the physical examination is essentially negative.

Reflexes are normal.

Has lost 30 Lbs Wt. during past six months.

Temperature since admission has ranged from 96.6 to 99.6. Pulse has ranged from 78 to 100. Respiration about 20.

Urine: Admission specimen: Yellow, cloudy, neutral, 1011; albumen, sugar Indican, acetone, casts, and cells all negative.

Subsequent specimen: Amber, cloudy, alkaline, 1015, indican positive, W. B. C., few, casts few; no sugar, albumen, diacetic, acetone or R. B. C.

Blood: Hb. 70 Dare. W. B. C. 11,350; Polys 80; S. L. 12; L. L. 6; Trans. 1; Baso. 1; R. B. C. 3,850,000; Wassermann, negative.

Chemistry: N. P. N. 38.2; U. N. 24.; Uric A. 2.6; Creat. 1.6.

Stool: Microscopic examination negative.

Sugar Tolerance Test: 96.0 mgms. per 100 cc. blood fasting specimen. 190 mgms. per 100 cc. blood 1 hr. after ingestion 100 gms. glucose. 158.0 mgms. per 100 cc. blood 2 hrs. after ingestion 100 mgms. glucose.

X-ray and fluoroscopic examination. Films: heart negative. Right side chest diaphragm negative; broad dense hilus; rather marked



fibrosis; rather marked interstitial infiltration upper portion

Left side chest, diaphragm negative; broad dense hilus; rather marked fibrosis and considerable interstitial infiltration of upper portion.

Impression: Old T. B. with considerable evidence of activity at this time or recently.

Fluoroscopic: There appears to be communication between the esophagus and the trachea below the larynx. Immediate films confirm this finding.

Nose and Throat consultation: Have no suggestion to make. Agree with the diagnosis already made. Dr. Dixon.

Fundus Examination: The discs are normal in outline and appearance. Vessels are slightly more tortuous than normal. There are no hemorrhagic nor scarred areas.

Blood pressure 132-100.

Treatment: Surgery is contraindicated. Am requesting consultation as to therapy with X-ray or radium.

### Discussion

*Dr. Horace Reed:* This case is similar to one previously shown here. Proper differential diagnosis is essential to treatment. If this is a secondary growth in the neck it is inoperable. If it is a primary growth in the neck surgery will help. I understood that at one time there was a history of lancinating pain behind the ear in this case. DeQueervain says that such pain occurred in a case of his of cancer of the ethmoid before metastases occurred.

In hard growths of the neck we should make sure that the primary growth is not in the mouth or nasal passages.

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\*This list is published bi-monthly.

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# THE JOURNAL

OF THE

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Articles sent this Journal for publication and all those read at the annual meetings of the State Association are the sole property of this Journal. The Journal relies on each individual contributor's strict adherence to this well-known rule of medical journalism. In the event an article sent this Journal for publication is published before appearance in the Journal, the manuscript will be returned to the writer.

Failure to receive the Journal should call for immediate notification of the editor, 508 Barnes Building, Muskogee, Okla.

Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

Advertising rates will be supplied on application. It is suggested that wherever possible members of the State Association should patronize our advertisers in preference to others as a matter of fair reciprocity.

### EDITORIAL

#### NATIONAL CANCER WEEK-RESPONSIBILITY OF THE PHYSICIAN

Last month we called attention to the hope that the Oklahoma profession would in every possible manner cooperate in making "Cancer Week", October 30th to November 5th, the outstanding success we may and will make of this date if we only use very little effort and intelligent application of the plan outlined.

To once more refresh our minds we will note some of the activities which may be undertaken in this laudable work.

First. The medical societies should arrange a comprehensive program in which their best minds will deliver papers on some subject of cancer.

Second. The same preliminary or arrangement meeting should provide for meetings to which the public is invited. For these meetings the greatest care is desirable as to formulation and execution of subjects to be handled.

No hurriedly prepared, indifferently written statements should be delivered to the people. Notoriously unable to comprehend the fine points of discrimination of this or any other medical matter, the material given them should be simple, but true and accurate. That delivered to women's and similar clubs should undoubtedly stress the great importance and menacing potentiality of the unrepaired lacerated cervix, vaginal outlet and breasts as cancer producers. The end results of ignored lesions, for years simple and unnoticed, about the human face, should not be overlooked.

Our duty is plain and easy. It is to warn the intelligent layman that cancer is largely preventable if taken in time, that we do not intend hysterical reaction as to these things or that the pendulum of proper safeguarding shall swing to the ridiculous extreme, but do wish to convey the actual fact that by timely care much misery, cripplement and death may be avoided.

Third. The man, more than any other, responsible for the ravages of cancer, is the physician himself. If he attends his labor cases, dismisses them without proper late examinations to ascertain the very common existence of cervical lacerations, easily repaired, demanding repair if a certain number of future cancers are to be avoided, if he forgets the potential destruction inherent in the simple little breast pump, in the small growth, "it never has troubled me", about the face; then, and most certainly he has neglected performance of a function that he alone may perform, knows the danger if neglect is his custom, and is the one trusted to stand between his charge and that very menace. Suppose we all together do our duty in this matter. If your society has not already met for this purpose you make it your duty to have a meeting called to do so. You are just as much the American Medical Profession as any other man, so it is up to you to do your duty.

#### UNIVERSITY HOSPITAL NOT A DUMPING GROUND

Elsewhere (See Miscellaneous, this issue) is a communication from Dr. Wann Langston, Medical Superintendent, University Hospital, Oklahoma City, which calls attention to a situation that has been causing friction and much unwarranted criticism of the hospital authorities since its formal opening for reception of patients.

There is every indication that these patients arriving unheralded by any prearranged advices to the hospital, have either been wholly left in the dark as to entrance requirements, misadvised unwittingly or deliberately. The cost



of caring for patients approximates four dollars per day per patient, so it will be at once seen that no institution can long maintain the strain, its meagre appropriations considered, which wholesale dumping of patients entails upon the management. This communication rightly hopes to secure the cooperation of the Oklahoma doctor who may direct such patients to that institution for care at reduced rates. We have stated before that this institution is the pride already of many observing Oklahoma medical men, it should grow in the esteem of the state-wide profession as the great good it has done and will continue to do becomes apparent, but no reasonable person expects it to receive hordes of non-pay patients and keep its doors open with the available resources at the point the Legislature now maintains.

In those cases where it is sought to enter patients, the physician should first advise the hospital, ascertain its ability to receive the case—it should be borne in mind that hospitals are often filled to capacity with a long waiting list—and make it very clear to the prospective entrant that he must be prepared to meet the modest charge of \$15.00 per week for his care. At that he contributes nothing for profit, barely meets the State half way. Cases of such nature that a long stay is inevitable should know this and most emphatically. We rely upon our profession to do the right thing in this matter.

#### INDUSTRIAL DEATHS AND DISABILITY

Industrial Deaths and Disability Toll of the Nation as given out by The Bureau of Labor-Statistics, Washington, deserves careful analysis with a view to decreasing those due to avoidable accidents. During 1920 twenty-four thousand men and women lost their lives while engaged in various industrial occupations. Three million were injured of which 3,000 were so severely hurt they never were able to resume their work. Commenting on the total, a writer states that "This means that ten persons were killed during each working hour, or 80 daily. Ten thousand were hurt every day, some so severely that they were permanently incapacitated. The figures are estimates of the Bureau, as seven states have no provision requiring report of accidents. It is said that in former years steam railways caused more fatalities than any other of the large industrial groups, while ore dressing has the fewest".

During the last twenty years industrial accidents have shown a sharp decrease, largely due to installation of safety devices, systematic inspection of hazardous machinery and the constant effort of organizations to warn those coming in contact with dangerous appliances. It seems only yesterday when amputation of

crushed fingers, toes, feet, hands, arms and lower limbs were the order of the day in the life of every railway or other corporation surgeon, now they are rare, and due to executing the early dressings and ingenious applicable surgical manœuvre, many such formerly doomed to loss of those members, have had preserved for more or less use the limb which the then surgical verdict amputated.

There is yet room for improvement, especially so as to the cases of prolonged, dangerous infections. Many plants have periodic instruction given employees both as to prevention of accidents and how not to meddle with what will be a simple thing if left alone until the surgeon takes charge.

We, however, experience constantly the case of small injury, when first seen by the surgeon grown into a formidable affair, brought to its bad state by well intentioned meddling by fellow workmen and foremen with misplaced ideas of their function, which is not to do surgery or render poor first aid, except to locomotives and machines under their charge. Inducing them to keep their dirty fingers away from wounds, washing the lacerated injury full of absorbable dirt and extra infections, in actual practice seems impossible of accomplishment. If the thousands of shops and plants of the country could only be taught the virtue of a clean, dry bunch of gauze over a wound, prompt transportation of the injured to the doctor or near hospital, then we would have a further great reduction of industrial disability and death.

#### "SILENCE IS GOLDEN", SO DOCTOR, KEEP QUIET.

"Silence is Golden", there is no doubt about it, but unfortunately we doctors, for that matter probably we only exhibit the ordinary human frailties when we face some sudden surprise, some unexpected outrageous attack upon us, often on a matter in which we are not culpable, have delivered our best efforts and honest service, only to face sudden and vicious attack, can hardly be blamed for forgetting what shrewd men know to be the best course and so we cry out against the outrage, we give out interviews for people to read which only agitates a matter often to our detriment. This especially applies to the doctor unjustly facing malpractice allegations. If there ever was a time when one should strictly keep his own counsel it is then. No amount of explanation will do any good, for the explanation goes to those who have absolutely no concern with the affair. It is none of their business and only arouses a morbid curiosity and interest otherwise best left quiescent. The only proper place to discuss the affair is in the Court, before the



judge and among our peers selected to pass the final verdict. The doctor should remember that that verdict is almost always with him. Most of these suits never even get to the jury, the court, knowing and sensing the outrage, rebukes the plaintiff and his low grade attorney by telling them "You have no case, not even after your uncontradicted story is told in entirety. All you have been able to dig up against this defendant, all your twistings of the facts, your distortions of trivialities, do not constitute a cause of action. The defendant is discharged, the jury is directed to return a verdict for him and return him to his labors not dishonored, but exhonored, as for you Mr. Plaintiff, Get out". This is the pitiable finale of most of them. A few get to the jury, but the tail end of the jury usually meets the front end returning from the jury room with a vindication for the doctor. So why all this hysteria over a suit. Look the World squarely in the eye, serene in the consciousness that you have done no wrong and that in the end your friends will have ample evidence that you have not. **But Doctor, Keep your mouth shut.**

#### DOCTOR, WHAT OF THE EMERGENCY? ARE-YOU PREPARED?

The temptation to rail out against the impossible condition as to orderliness, sanitation and neatness in the offices of the doctor has long abided with us, but the realization that the effort probably would add to the reputation of being an "Old Scold", and procrastination on other scores has deferred the work. Now we have had our attention called to a leading article in *Hospital Management*, a National publication devoted to the interests of hospitals and their problems, wherein the achievements of the Oklahoma Hospital, Tulsa, during the recent racial disturbances, is graphically depicted by Dr. Fred S. Clinton, the hospital's Chief Surgeon. Adoption of the 13 rules set forth should be considered by all our hospitals and in modified form, so far as applicable, by doctors, especially those called upon to do emergency work throughout Oklahoma.

##### "Regulations Governing Emergency Cases"

(1) Do not get excited, but proceed in an orderly and systematic manner to render a real service to the patient. Keep others quiet. Unless required to restrain patient exclude everyone from the room while preparing patient for bed or operation.

(2) Call the doctor as soon as you hear or know anything about the arrival of a patient.

(3) Carefully remove all clothing, if possible; at least loosen tight clothing, and see that all valuables or evidence of any nature are preserved until properly accounted for.

(4) Prepare hypodermic (morphine sulphate, grains 1-4 and atropin 1-150) but do not give it until ordered by the doctor.

(5) Bathe the patient around the injured parts, being careful not to contaminate open wounds or disturb broken bones.

(6) Make patient comfortable as possible by use of pillows, application of heat outside of blankets, etc.

(7) Do not give patient anything to eat, drink or smoke unless it is permitted by doctor.

##### "Start The Sterilizer."

(8) Start the sterilizer and see that it has water in it. The following supplies should be in readiness for any case of sudden injury. Plenty of hot and cold water, two or more basins slop pails, soap, scrubbing brushes for hands, towels, sheets and such instruments, or splints as occasion might require as follows:

(a) For emergency, hot sterile water, sponges, gauze, cotton, bandages and necessary instruments

(b) For fractures, plenty of cotton, splints or material from which they may be made, bandages and adhesive plaster or plaster of paris.

(c) For burns or scalds, sterile ointment, vaseline, gauze, wood or metal spatulas for spreading the dressing and necessary bandages.

(d) For shocks, hot water bags or bottles and warm blankets.

(e) For sunstroke, thermic fever, cold water and ice, heat exhaustion, stimulants.

(f) For poison—prepare to wash stomach, etc.

(9) Get gown for patient and doctor.

(10) If injured area is covered with hair, prepare to shave the same.

(11) Case of open injury sterilize instruments, gloves for necessary care of same.

(12) Use utmost gentleness in the care and handling of every injured person, keeping in mind your responsibility and the reputation of the institution for intelligent and sympathetic service.

(13) Avoid the discussion of the patient's injuries or condition in his presence.

"If wisdom's ways you widely seek, five things observe with care: of whom you speak, to whom you speak and how, and when, and where."

#### RULES FOR ADMISSION OF TUBERCULAR PATIENTS TO TALIHINA SANITARIUM

Drs. A. R. Lewis, State Commissioner and D. Long, Superintendent of the Talihina Sanitarium have issued regulations governing the above matter. It is believed that it will be of useful interest to note those sections which

concern the physician attendant of this class of cases.

A charge of \$12.50 per week will be charged those able to pay, those unable to pay may be entered, under terms of the law enacted in creating this institution, by application from the patient, verified by affidavit of a county commissioner that the patient is a resident of the State, unable to pay, and that the expense will be met by the county from which the case is sent. The excise board of the County is authorized by the Act to make special levy to meet such expense. They must be admitted on request of either the county health officer, public health nurse of the sanitarium, or the State Board of Health. Certain necessary forms which will, when completed contain all available information as to the case, are to be obtained by application from the State Commissioner of Health or the Superintendent of the Sanitarium, Talihina.

The various officers concerned with the operation of this new institution expect the support and aid of the profession in execution of these details. It is strongly urged that by no other procedure may admittances be made, and any deviation from the established rules, or attempt to evade them will only cause unnecessary delay in a matter of which delay is more than dangerous.

### THE OKLAHOMA DOCTOR AND UNIONISM

The JOURNAL has just received from a committee of the Muskogee Typographical Union a statement signed by its representatives—men of the very highest type of citizenship and real worth. The letter is a brief statement that Muskogee employers have declared for the "Open Shop", that the strike now existing is not due to controversies over wages or hours, but a deliberately prearranged program to destroy the principles of Unionism. We are asked, of course, to study the problem and pass upon the merits of the matter.

Discussion of these matters probably is unusual in the pages of a medical publication, but as our profession is an important part of the entire citizenship, it is our duty probably to assume our share of the decision in such matters. It is a very questionable attitude to assume, that most of our profession have assumed in the past, that we are not concerned with "politics", with this and that, that we are only concerned with medicine. We touch, in our work, every phase of human endeavor. Unless we give the vital things, which affect us as much as any other person, due study and stand for the right, we will have missed doing our duty exactly in extent to the proportion we treat, or mistreat, such matters.

This letter, however, gives an opportunity to note some facts relative to the pernicious misstatements and policies adopted by Union Labor toward the Oklahoma doctor, and toward those things the doctor imagines he knows more about than any union labor official, who we can not but regard, the light of past experiences in the scales, as wholly unjust to our profession, also, wholly unfitted to pass on the complex problems with which the doctor only is fitted to deal. This complaint especially refers to an episode occurring just prior to the last election (Nov. 1920), when the statement was calculated to do the most damage, a statement, by the way, wholly untrue, and which will be seen at once to be untrue, surely known by the speaker or proponent as untrue, if anything under the sun is false. At Shawnee, certain alleged leaders representing the State Federation of Labor were either seduced by sophistry or cheap argument—and our Charity prompts us to give it that cloak—issued a statement asking union labor to stand with the Chiropractics, to vote for their measure, that the medical profession was a "Trust", a "Combine", and always found opposing union labor. A meaner untruth was never uttered, for the doctor, ever close to the stern realities of existence, certainly is in the majority found supporting the oppressed. Certainly he has never been found "knocking the block off" some other doctor who attended a case he would not attend by reason of former unpaid services. The "blacklist", the "unfair to the doctor" list is practically unknown and a list of delinquent patients is always frowned upon by sympathetic physicians for the very reason that harm may befall the helpless child of the man in question, that human suffering must be relieved regardless of the pay. How does that compare with the selfish actions of certain organized bodies? They are now reminded that refusal to issue transfer union card to the parting dead beat member by his union, is unknown. He is allowed to go Scot Free to the detriment of the people to whom he goes, with the "God Bless You", in the form of a union card. Yet this Shawnee meeting called us a "Trust" and "unfair". Like producing like, the latest assininity to have birth in the same city, Shawnee, came the other day in the form of a resolution of record, which would have the lawmakers prohibit the writing of prescriptions in any except English words. Latin especially, these "fitted", organised pirates upon the common, unorganized, would taboo. If there ever was a proposition proposing to regulate that of which the regulators know nothing, it was this very one. Feeling his weakness and impotence in the face of precise, hard earned knowledge, he would remedy it, by rising? No, but by pulling the



fitted down to his unfit level. Not knowing nor caring to know that every name existing in medicine today, especially anatomical, has for its parentage the Latin, that discarding that derivation would be more difficult than changing every town name in the United States, for instance, simply because it sprung from its Indian forebears. Nor does he know that the words composing the English prescription today, pass current the world over, that it is the language of precision and science. Lastly he does not know that his proposition is that of the ignoramus to the informed.

With these two instances for foundation it is not difficult to imagine what would result were these impertinent "regulators" vested with the power to dictate to the public. That their effrontery has only one bound is apparent and that is their own selfish interests. All other considerations must bow to that. Exercise of liberty of thought and action has no place in his curriculum, if it dares to use the prerogative born of American liberties, hire and fire whom he pleases, pay wages according to what is earned, rather than on a scale which would give the inefficient the reward of the efficient.

We remind these organized disorganizers that we abhor their McNamara's, their Sam Parkses, the spirit that would starve an American simply because he chooses to do as he pleases. Much could be written about the matter, but it is sufficient to point out that the doctor will not be a party to any organization which has for its highest principles the securing of values by brigandage upon the unorganized. We reserve the right to serve whom we will and for what those concerned agree is just remuneration. We remind them, however, and here is wherein the doctor demonstrates that he is not fitted to be a union man, that we shall continue to alleviate human suffering regardless of its cloaking or disguise. The day will never come when we will have to grovily ascertain if the man we are about to serve is the possessor of a "Union Card". Our profession demands that there be no limit to attainment upward, that the laborer in our field must evidence the ability to deliver the goods on his own abilities else fall by the wayside in obscurity. The efficient will never be found harnessed to the low level of our inefficient. Is that not sufficient demonstration that we are not a "Trust"? It may be, let the shoe pinch if unfit, that that too, demonstrates that we can never be a "Union".

It is our belief that Union Labor has more than its hands full if it passably attends to its business. About the last thing it should dabble with, unless it be some misguided Ass, is the science of medicine. These "organized" should

sense their utter unfitness for dictation of matters so far beyond their capabilities. We have no objection to their coming "up", we do object to going backward and will not descend to their level.

The Oklahoma doctor should not forget the high regard in which he is held by these worthies.

### *Editorial Notes—Personal and General*

**Dr. E. Forrest Hayden**, Tulsa, has been sued for malpractice. A sponge is alleged to have been left in the wound.

**Dr. J. A. Morrow**, Sallisaw, has been sued for alleged malpractice.

**Dr. F. K. Lewis**, formerly of Sparta, Tenn. has located in Sapulpa.

**Cancer Week—Do Not Forget The Date**—October 30—November 5th.

**Dr. C. W. Heitzman**, Muskogee, visited California points in August and September.

**Dr. G. S. Barber**, Lawton, has been served with summons, alleging malpractice.

**Dr. Leila E. Andrews**, Oklahoma City, visited Excelsior Springs during September's Vacation days.

**Dr. and Mrs. W. R. Butler**, Maud, made an extensive automobile trip over southwestern Texas in August.

**Dr. J. J. Nabhan**, Tulsa, announces his early departure for Europe where he will remain for several months.

**Dr. Curt Von Wedel**, Oklahoma City, has been sued for alleged malpractice. Failure to remove enough tissue is alleged.

**Drs. E. O. Barker and M. W. Larkin**, Guthrie, have been sued for malpractice, in Logan County. Death due to ether is alleged.

**Dr. J. A. Copus**, Muskogee Dentist, charged with performing a criminal operation received sentence of four years on jury trial.

**Drs. A. P. Gearhart and Wm. Leslie**, Blackwell have been sued for alleged malpractice in Kay County. Death due to shock is alleged.

**Sulphur's Soldier Hospital** will be constructed by W. S. Bellows, Oklahoma City, whose bid of \$138,000 was the lowest of ten bidders.

**Dr. Frank Bates**, Coalgate, and Miss Myrtle Jones of that city were married September 15th., immediately departing for a bridal tour to St. Louis and Kansas City.

**Oklahoma City Babies** entered at the Health Contest during the Oklahoma City State Fair were examined by a corps of 37 Oklahoma City physicians.

**Oklahoma County's Tuberculosis Hospital** will be opened for care of patients during October, according to announcement of the County Commissioner in charge.

**Dr. and Mrs. Dick Lowry**, Oklahoma City, have returned from several months sojourn in New York City where Dr. Lowry has been doing special work at Bellevue.



Oklahoma County Medical Society will hold its first fall meeting and banquet September 24th in the evening. Thereafter meetings will be held as per regular schedule.

Dr. and Mrs. S. N. Mayberry, Enid, returned late in September from a two months motor trip to Colorado, Wyoming and Minnesota points, ending their vacation at their summer home, Government Point, Minn.

Council Passed\* The following articles, product of our advertisers, have been accepted by the Council on Pharmacy and Chemistry, A. M. A. Procaine, Abbott. Tablets of Benzyl Succinate-Hynson, Westcott and Dunning. Caseo-Mead Johnson & Co.

Dr. John T. Slover, Sulphur, has just undergone the experience your Secretary-Editor has always maintained every physician and nurse should experience, a successful operation for appendicitis. Dr. Slover is rapidly convalescing and will soon be about again.

Dr. Arthur Pimmer Lewis, State Commissioner of Health and Miss Mildred Hargis, Oklahoma City were married at Oklahoma City September 15. The JOURNAL joins the many friends of Dr. Lewis in extending congratulations and good wishes on his step.

Dr. Benjamin H. Brown, Muskogee, excited the envy of the Journal by sending a picture card of his amiable self propelling a hirsch bark canoe over Iron River, Michigan, where he and his family are enjoying the crisp northern air and taking their vacation in the best manner known.

Kiowa County Commissioners recently adopted resolutions fixing fees which would be allowed for medical attention rendered indigents and other persons unable to pay for such service. Proviso was attached requiring some person interested in summoning the physician to make affidavit setting forth inability of the patient to pay.

Neurology and Psychiatry Sections, Hot Springs meeting, Southern Medical Association will hold their first meeting November 14th the preliminary program issued by Secretary, Dr. Paul V. Anderson, calls for a symposium on "Early Detection of Insanity", with four papers, the remainder will offer six papers with the Chairman's address and discussions on the subjects offered.

Dr. Thos. Lane, El Reno, has assumed the position of "the worm that turneth". Injured badly by careless automobile driving, he has taken the identical course so many of the "Deer pepul" have lately been taking against our profession, he has gone into Canadian County Courts asking the sum of \$2,574 damages resulting from the injury. We are vindictive enough to wish him every success.

Dr. Frank H. McGregor, Mangum, has been honored by election to the Post Commandership of the Mangum American Legion, just when that city has completed a very handsome home for the Legion. In passing it is proper to note that Dr. McGregor came home our most decorated physician, while it will be news to many that Mangum also possesses the only aviation "Ace" in Oklahoma.

Tulsa County Society again enters the harness, its first fall meeting announced for October 10th. The society recently passed a resolution of thanks for Collier's Weekly anent the editorial "Keep Hands off the Doctors". Resolutions condemning reckless driving in Tulsa, on part of ambulance drivers which has enacted a high toll were also passed and sent the newspapers as well as the undertaking companies. Drs. W. A. Cook, G. A. Wall and A. W. Pigford were appointed a Committee to push Tulsa's claims for the proposed Soldier Hospital. Drs. Wall, Pigford and C. W. Osborn were delegated to seek passage of ordinance prohibiting the use by automobile drivers of the physicians emblem.

Hospital Location Advantages, it is proposed will be the subject of a questionnaire by the Soldiers Relief Commission, American Legion which proposes to mail a set of questions to each city candidate for the hospital, which, when completed will cost \$500,000. The Commission will ask each city why they think the hospital should be located in their particular baliwick. Well, we will answer for our own town right now. It is large enough, accessible, possessed with a very fair ability, professionally speaking, has abundant entertainment facilities, including high grade hotels, theatres, parks, people of good social attainment, culture, wealth, sympathy for the stricken boys, a water supply impeccable since its creation to this day, and very likely to remain so, a past history as to achievements in all things municipal and patriotic not necessary to remind the Commission of. Volumes could be written, but we believe this covers the essentials. We will be glad to hear from other centers, for this publication is partial to no one and open to all things reasonable.

Pawhuska Parking Ordinances are the Bete Noir of Dr. Leonard Williams of that City, who asks the JOURNAL the Why of the Irritating thing. Well, as our legal opinion is often sought we give it in this connection as being the proper right absolutely of Oklahoma cities, and towns to enact all reasonable regulations safeguarding the comfort, lives and happiness of the citizen. Among these powers is the right to require persons to inconvenience themselves for the good of all, the legislature especially conferring street and traffic regulation ordinances to the wisdom of the municipality. As a rule, however, much latitude is permitted the hurried, harried physician, he may park his car in direct violation of the law, in emergency demanding that course, he may exceed the speed limit on occasion and no sensible court will hold him at fault therefor, but if he has plenty of time, no hurry necessary, he has no right to do that which the ordinary mortal may not do. Perhaps the Pawhuska City Fathers need a reminder that sometimes a doctors movements are more vital than that of the police patrol or fire wagon.

Dr. Earl D. McBride, Oklahoma City, brings home many stories of interesting facts and information relative to the European situation as left by the World War. As instancing the difficulties under which the "New Democracies" are struggling he recites the widespread inability of the common people to adjust themselves to the new situation. Asking the name of the President of Austria elicited almost total ignorance, they knew they had something "like you Americans, a Republic", but could not even recall who their President was. He verifies much of the news reports as to the frightful condition of the people, there is much actual physical suffering and hunger, and the situation is not confined to any one class for many of the great fortunes formerly existing were swept away by the wars destructiveness and as a consequence the better class of people suffer along with the others. Food is very scarce and unobtainable in many sections. The Austrian Kronin, before the war was worth about 20 cents, is now worth only 1-10th of a cent, so the fortunes of thousands of Kronin accumulated by years of thrift has dwindled until now it represents only a few dollars in actual, intrinsic purchasing value. Truly the Hapsburgs Junkers, and Hohenzollerns have much to answer for, in fact no atonement commensurate with the suffering they created by their foolishly permitting war, when a word would have halted it, can ever be made.

The Surgeon General, U. S. Public Health Service announces that owing to the great interest taken in the Washington meeting the one planned for next fall has been abandoned and instead, in order to give every one in the country opportunity to participate in the work, a series of twenty-four institutes will be held in the centers below indicated, on the dates specified. The Hot Springs and Chicago meetings will consider venereal problems only. The Surgeon General advises as follows:

It is expected that most of the well known specialists announced for the two-weeks' institute in Washington

will be on the faculties of two or more of the various local institutes. Below is a schedule of courses which will probably be adopted, with various alterations, by most of the institutes. No tuition will be charged.

Last year four times as many persons attended the Venereal Diseases institutes as were expected. In order that adequate plans may be made for this series of local institutes, prospective attendants should mail a card to that effect to H. S. Cummings, Surgeon General.

#### Tentative Schedule of Dates

Hot Springs	October
Jacksonville	Nov. or Dec.
New Orleans	Jan. 9—14
Columbia	Jan. 9—14
Dallas	Jan. 16—21
Birmingham	Jan. 16—21
Memphis	Jan. 23—28
Louisville	Jan. 30—Feb. 4
Indianapolis	Feb. 13—18
Pittsburg	Feb. 20—25
Lansing	Mar. 6—11
Chicago	Mar. 13—18
Minneapolis	Mar. 20—25
Los Angeles	
San Francisco	
Portland, Oregon	Apr. 10—15
Kansas City, Kansas	Apr. 10—15
Spokane	Apr. 17—22
Newark	Apr. 17—22
Helena	Apr. 24—29
Albany	Apr. 24—29
Denver	
A New England City	May 1—6
Washington	Late in May

#### DOCTOR GAYLORD AMES STAFFORD

Dr. G. A. Stafford, Keiffer, for many years one of Creek County's useful practitioners died September 18th. at the Duke Sanitarium, Guthrie, after an illness of several months, brought on by the strain incident to overwork.

Born in Martinsville, Indiana, September 23, 1871, moving with his parents to Winfield, Kansas when 7 years old where he grew to manhood, attending the common schools, after which he graduated in medicine at a Kansas City Medical College. He was married to Miss Anna E. Mathers, March 7, 1898, at Pawnee, Oklahoma, and from the union two children were born, the son surviving, now 18 years of age. During his life in Oklahoma he practiced at Ralston, moving from there to Keiffer where he has since been an active useful citizen. Funeral services under auspices of Rose Croix Chapter were given, the midnight service of that body being used. Dr. Stafford was also a member of the Odd Fellows, Elks, Ben Hur and other fraternal organizations. His immediate survivors are a wife, an aged mother past the fourscore mark, a son and brother. Many other more distant relatives mourn his loss, as does a large number of appreciative friends who had grown during the years of association to value his good works.

#### DOCTOR BENTON LOVELADY

Dr. Lovelady is dead, death came to him in the prime of life, Aug. 30th., just when he was best prepared to render service to the human family, and after several months illness brought about by a tumor of the brain.

Dr. Lovelady was born on a farm in Southwestern Missouri, near Greenfield, July 9, 1877, moving to Indian territory when 15 years of age. Attending The Chattanooga Medical College as his meager earnings as a farm laborer permitted, he finally achieved the goal of graduation in 1905. He practiced between terms as many of us had to do in the Southwest, locating successively at Irene, then in Indian Territory,

later, Bearden, Okemah and finally at Guthrie, where he lived when death called him. During the time he was associated with Dr. C. W. Board, Okemah, F. Y. Cronk and J. L. Melvin, Guthrie. At the termination of his career he was doing surgery exclusively and well. He was an enthusiastic Mason and interment was had at the Guthrie Consistory, the midnight service being rendered on September first. Interment was had at Summit View Cemetery, Guthrie.

During the World War Dr. Lovelady applied for and was commissioned Captain, M. C. August 1918, received intensive training at Oglethorpe and Jacksonville and was about to sail for overseas duty when the Armistice was signed.

The many friends extend their sympathetic regret to the family in the untimely taking away of one of our number.

## MISCELLANEOUS

### ADMISSION OF CLINICAL PATIENTS TO THE STATE UNIVERSITY HOSPITAL

Patients are admitted to the clinical service of the State University Hospital upon payment of a nominal sum of fifteen (\$15.00) dollars a week, which covers all expenses there being no extra charge for medical and surgical service, nursing, special investigations, etc.

In order to render the Hospital more accessible to the citizens of all parts of the state, the State has made no provisions for free beds at the University Hospital; the State assuming that the community from which the patient comes should pay the nominal charge of fifteen dollars per week, which goes into the revolving fund of the Hospital. Therefore, it is necessary in every case that some one provide the fifteen dollars per week. This charge must be paid by the patient himself, or his friends, some local organization or by the Board of County Commissioners. In the latter case, the patient must bring authority from some member of the Board.

In order to take advantage of these services, it is necessary that the patient present a statement from some reputable physician or authorized official to the effect that he is unable to pay a regular fee. Warrn Langston, M. D.

Medical Superintendent, State University Hospital.

### *Abstracts, Observations from Current Medical Literature*

#### EXTRACTS OF ARTICLES OF ORTHOPEDIC OBSERVATIONS ON THE OPERATIVE TREATMENT OF SCOLIOSIS

Royal Whitman M. D. New York City  
(*American Jour. Orthopedic Surg.* July 1921)

He explains that his remarks apply primarily to a class of cases of fairly advanced scoliosis in which backward projection of the ribs is the most noticeable element. He reviews the fact that Dr. Abbott's method of overcorrection, and all others up to the present time have been proven too severe punishment to the patient and for the partial correction obtained and for the lack of better methods, he has been employing for the last five years correction by lateral traction and application of cast while the patient is suspended in upright position.

During the past year he has given the operative procedures of Ilhb's and Forhe's a trial. The correction in the upright position is the first step. Later the patient is placed in recumbency on a convex stretcher frame for

two or three months. Then the operation of fusion of the spinous processes and laminae is done to procure a wide area of ankylosis and this holds the correction permanently.

He has only twelve cases so far to report and does not express final opinion on the efficiency of the method.

Earl D. McBride, Oklahoma City.

#### CONGENITAL TORTICOLLIS

W. W. Meyerding M. D., F A. C. S.

(*Am. Jour. Orthopedic Surgery*, March, 1921)

Torticollis of congenital origin is a deformity rarely met with in general practice of medicine and surgery. Only 26 of more than 212,000 patients examined at the Mayo Clinic from Jan. 1910 to Oct. 1919 had a diagnosis of congenital torticollis and operation. The average age was 17. Twenty-three of the 26 had had no previous treatment. The rarity, lack of, or inadequacy of the previous treatment together with the advanced age and marked deformity appear to warrant an investigation and report of results. Torticollis of other types such as spasmodic, rheumatic are not considered.

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\*Names of officers for 1921 will be added to above as they are reported for the year.

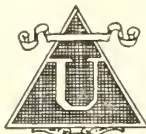
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# THE JOURNAL

OF THE

## OKLAHOMA STATE MEDICAL ASSOCIATION

VOLUME XIV

MUSKOGEE, OKLAHOMA, NOVEMBER, 1921

NUMBER 11

### SYMPOSIUM ON NEPHRITIS.\*

- (a). Clinical Nephritis: *Dr. Lea A. Riely*, Oklahoma City.  
(b) Renal Function Tests in Nephritis: *Dr. Wann Langston*, Oklahoma City.  
(c) Renal Pathology in Nephritis: *Dr. L. A. Turley*, Norman.

#### CLINICAL NEPHRITIS

By LEA A. RIELY, M. D.  
Oklahoma City, Okla.

I shall go back to 300 and 400 A. D. when Aetius associated dropsy with the hardened kidney and then the latter half of the eighteenth century when Morgagni described clinical and anatomical cases of granular contracted kidney; 1831 when Bright gave to medicine his classical description of chronic renal disease; 1841 Henley's classical description of the history of the kidney, then Bowman's work on the finer structures of the kidney; 1852 Virchow's article on parenchymatous inflammation; all the above dealing with structure rather than function.

"Valhard and Parr have attempted to classify renal disease upon a functional basis and correlate the anatomical lesions found at autopsy with the functional findings during life. This has proved little, if any, more satisfactory from a diagnostic standpoint than did the older anatomical method of classification so that we are forced to the conclusion that any classification of renal disease whether it be upon a functional basis a symptomatic basis or upon an anatomical basis has many limitations and exceptions, that it is inexact from a scientific and confusing from a therapeutic point of view".

When I was a medical student, the clinical classification of Nephritis was attempted on the basis of pathological anatomy as seen at autopsy. A diseased kidney may start as parenchymatous and end up with the connective tissue pathology being the most observed or have both occurring together. Then we described the large white and small red

and small white and mottled kidney and tried to make a clear cut clinical syndrome to differentiate between interstitial and parenchymatous nephritis.

Simplicity in nomenclature seems to be a feature that is pervading all specialties of medicine and let us hope that it will do away with some of the big names which are simply a cloak for our ignorance.

Chrisitan merely speaks of chronic nephritis with urea retention and without, with edema and without.

He says there has never been any very general agreement among pathologists as to classification and without their agreement, the problem seems hopeless for the clinician if he attempts to harmonize clinical course with pathological classification. He says the pathologists speak one language, that of morbid anatomy. The clinician thinks and speaks another language—that of symptoms and diagnosis.

Etiological classification is not practical since even if we knew the etiology of different cases, we would find they would not run the same course. They may start out as one type and end up as another. May even engraft an acute on a chronic form.

The term Nephritis, Nephroses (Epstein) and Nephropathy (Councilman) used by different writers and teachers on kidney lesions are terms which are not necessarily synonymous. Nephritis is a term in which we necessarily imply inflammation and many of our kidney lesions may not necessarily be due to an inflammatory trouble. We use the term Nephritis here in the sense of a diffuse progressive degenerative or proliferative lesion involving renal parenchyma or interstitial tissues or both. In the vast majority, cases of acute Nephritis are of infectious origin. We used to be taught that cold and exposure were the important causes and certainly they have something to do with certain cases. We expect the nephritis of childhood to be due almost solely to bacteria or toxins as an etiological factor. Pneumonia, Typhoid fever, etc., cause the presence of albumen or red cells for a few days in the urine

\*Read in Section on General Medicine, Neurology, Pathology and Bacteriology. 29th Annual Meeting, McAlester, May 18, 1921.



and Hill terms this as acute renal irritation and reserves the term Nephritis for those cases in which inflammatory condition is more lasting and the dominant feature in the disease picture. To Scarlet Fever has long been attributed the cause of most cases of Acute Nephritis, but more cases are secondary to Tonsilitis than Scarlet Fever. Those of tonsillar origin generally appear about a week or two after the tonsils have become normal. The glomeruli and tubules are both damaged.

The acute diffuse nephritides may be either (Hill) (1) Acute Haemorrhagic Nephritis characterized by a very bloody urine, very few casts, urine not diminished in amount and edema very slight. Renal function tests usually show a moderate impairment of kidney efficiency, but never the severe impairment that is seen in edematous cases with scanty urine and many casts. The subjective symptoms are insignificant and uremia is never seen in this type of Nephritis. Prognosis as a rule is good and we seldom see children dying with this type of the disease. In a few cases this develops into a chronic diffuse Nephritis; (2) Acute Exudative Nephritis. Edema marked sometimes making our patients look unhuman. Urine output is scanty during the early stages when later a polyuria. Urine has large amount of albumen brownish and heavy sediment of disintegrated blood, granular and cellular casts. Blood pressure elevated. May be headache and convulsions and a patient may die in uraemia. Renal function shows impaired kidney efficiency. Prognosis not so good as in acute hemorrhagic type.

When this disease proceeds to chronicity every glomerulus shows the result of previous damage in a peculiar hyaline thickening, the convoluted tubules all show varying degrees of degenerative change and coincident with parenchymal change the interstitial connective tissue undergoes a more or less diffuse increase and we get a chronic Nephritis.

Just what relation the kidney disease in childhood is to kidney diseases of adolescence is a question; suffice it to say that many cases of functional kidneys in childhood are followed in adolescence by forms of organic disease of these organs and many chronic Nephritides in adolescence have no obvious origin.

The term Nephroses (Epstein) occurs in relatively young persons, origin obscure, bears no relation to infectious diseases. Pregnancy may be an etiological factor, albumen heavy, casts may be present or not. Blood pressure not elevated. At first the condition may be devoid of other gross manifestations but as it progresses oliguria and edema develop. Cardiovascular changes are not present unless

brought about by some secondary causes. Pallor very pronounced. Subjectively the patient complains of headaches, dyspnoea and vomiting. The degenerative processes in the kidneys in chronic nephrosis is due to an intoxication because of the similarity of the lesion to that produced by certain toxins and mineral poisons. Saw a case recently where a complete suppression of urine had complicated a case of inoperable carcinoma uteri. Although complete suppression had been present for twelve days and mentality was quite good, her edema was not so marked, she had compensatory diarrhoea, a very urinous odour to her breath, intolerance of food or medicine by stomach.

Thus for example an acute tubular destruction is produced in poisonings with bichloride of mercury, bismuth, salts of uranium etc. Other causes are attributed to febrile diseases, especially diphtheria, yellow fever and other infections. When the destruction of tubular epithelium is not sufficient to produce death, complete recovery takes place in a few weeks as the tubules possess a remarkable capacity for regeneration.

One case of a woman observed 22 years ago with edema, hematuria, oliguria, orthopnoea, recovered and is one of our most active women suffragists and all clinical signs and symptoms have disappeared.

A boy of six years (12 years ago) was sent to me with intense edema, oliguria, hematuria and blood casts which had appeared after an attack of tonsilitis. Under treatment he entirely recovered and now shows no evidence of former trouble.

Nephropathy is a term which can be applied to all types of kidney trouble. There are types of Nephropathy where the patient has inherited a vulnerable kidney and has helped the matter along by the wear and tear of long hours, lack of vacations, a devotee of Bacchus, Venus, Mars and Vulcan: a class of cases which are becoming only too frequent at present owing to our strenuous modes of living. These cases are called Interstitial, Gouty, Contracted, Cirrhotic kidney or Senile Kidney.

These conditions come on stealthily and slowly and the victim is cut down before our eyes in a seemingly strong and vigorous manhood. Here the frequent fatal termination of cases by apoplexy frequently nasal and retinal hemorrhages which characterizes the disease. Two factors are recognized in production of these hemorrhages (1) Toxic; (2) Hypertension and it is probable that both may be acting in production of a hemorrhage. The internist would explain such hemorrhagic phenomena in the case of a chronic nephritis by a diagnosis of secondary purpura haemorrhagica or symp-

tomatic purpura due to some toxin of nephritis. A case of a man 56 years ; of excellent habits was stricken without any special warning with uraemic convulsion. His urine contained slight albumen granular casts. He had palpable arteries, nocturnal polyuria and urine 1500 cc per diem. Blood pressure 220-120. Non protein nitrogen 106.7. Uric Acid 11.5 Urea Nitrogen 68.3 Creatinine 3.42. Died in three weeks after uraemic seizure. Had hemiplegia week before he died.

A man 52, merchant, mother living, with blood pressure 250-130. Excellent habits, close application to business. In course of routine physical examination found albumen and casts in urine negative. P. S. P. 35% in 2 hours. Blood Pressure 190-110. N. P. N. 41.3 Uric Acid 46. Urea Nitrogen 21.2. Creatinine 1.94. Was stricken with an aphasia and hemiplegia in 3 weeks after examination. Died with a broncho-pneumonia.

The similarity of outstanding symptoms such as albuminuria, oliguria and edema make them frequently almost indistinguishable. Recent investigations on the chemistry of blood and urine have added much helpful information to the diseases in question but ultimate recognition of the exact nature of the renal disease in a given case oftens depends upon historic facts, etiology and associated clinical phenomena.

The testing of the kidney to concentrate as evidenced by the Mosenthal or 2 hour test is certainly one of the most dependable of our tests. (1) The determining of nocturnal polyuria (i. e. as much as 600 cc urine); (2) A fixed specific gravity (hyposthenuria) i. e. to within 9 points. Fixation at a high level is of doubtful significance and may be found in those not showing evidence of nephritis. (3) Marked deficiency in ability to concentrate salt and nitrogen.

The ability of the glomeruli and tubules to excrete a dye (phenolsulphonaphthalein) gives us a clue to the crippled kidney long before some clinical symptoms are apparent. We look with distrust on a kidney which is only excreting 40% or under in 2 hours. We find all our fatal cases excreting no dye. O'Hare reported one case, however, in which he watched for 4 years without dye secretion before he died.

Orthostatic, postural or lordotic albuminuria is not an inflammation of the kidney—it is simply a matter of Hydrostatics in which a child held in position of lordosis develops an albuminuria without casts while urinary examinations before and after that have been negative for albumen and casts. Hamberger in Vienna used to produce orthostatic albuminuria by strapping children to boards in lordotic

position or putting pillows under their backs, etc.

Association of Diabetes and Nephritis is not uncommon. The absence of edema in diabetics suffering from so called parenchymatous nephrities is remarkable.

The effect of prolonged sugar secretion and of Ketonuria on the kidneys is fairly well known. As the kidneys become more damaged, the sugar threshold is raised and patient becomes aglycosuric but albuminuric, a condition which Joslin calls Diabetes Alternans.

## KIDNEY FUNCTION TESTS IN RENAL DISEASE\*

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The accumulated experience of many observers has demonstrated the futility of the attempt to make an accurate anatomical diagnosis of renal conditions from the clinical signs and functional findings. But in the development of the renal efficiency tests we have found a ready means of detecting abnormalities of kidney function, many times before the patient has a single symptom, and before the ordinary urine analysis gives a single indication of involvement. With these tests we can judge the extent of the damage with a considerable degree of accuracy, render a prognosis with a fair degree of certainty, and direct the treatment with a degree of intelligence not obtainable in any other way. Without them, however acute a diagnostician one may be, he will find cases in which a differential diagnosis is impossible. A single one of these tests, however, will not give the desired information, but we must utilize numerous ones, only two of which can be discussed in this paper.

It has been said that the fundamental function of the kidney "is its osmo-regulatory power, its power to maintain at a constant level the molecular concentration of the blood." This function is performed by concentration of the end products of metabolism in the urine. Failure to perform this function manifests itself by the presence of abnormal constituents, or of abnormal amounts of normal constituents, in the blood and urine. Detection of these abnormalities forms the basis of the renal functional test we shall discuss.

The average normal individual, taking a reasonable amount of food and liquid, will eliminate in twenty-four hours all the sodium-chloride, 90% of the nitrogen, and within 400

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cc. of the total liquid intake: not more than one third of the total elimination of water will occur during the night, the specific gravity of the various specimens will show a marked variation, and that of the night urine will be 1018 or above, and will show a nitrogen concentration of around one per cent. These facts form the basis of one of our most dependable functional tests, the so-called "nephritic test meal" test, first proposed by Hedinger and Schlager, and elaborated by Mosenthal, and commonly known as the Mosenthal test.

The test is carried out as follows: The meal is given in three portions at 8:00 A. M., 12:00 M., and at 5:00 P. M., following a light supper the previous day. This meal contains approximately 8.5 grams salt, 13.5 grams nitrogen and 1760 cubic centimeters of water. All food and liquid not taken is measured or weighed and charted. No other food or water is allowed during the period of the test. The urine is collected as follows: first specimen at 8:00 A. M. on the day of the test is discarded; specimens collected at 10:00, 12:00, 2:00, 4:00, 6:00 and 8:00, and carefully saved; all urine voided from 8:00 P. M. to 8:00 A. M. the following morning is saved as a single specimen. The amount and specific gravity of each specimen, the amount of salt and nitrogen in the day and night specimens, and the total amount of urine are then determined.

Table 1 shows the normal reaction to this test and illustrates the method of recording the results.

TABLE 1

Time of Day	Urine		Sodium Chloride		Nitrogen	
	cc	Sp. Gr.	Per Cent	Grams	Per Cent	Grams
8-10	150	1015				
10-12	160	1018				
12-2	140	1012				
2-4	200	1019				
4-6	130	1025				
6-8	200	1023				
Total Day	980		0.8	7.8	0.7	6.0
Night 8-8	425	1020	0.6	2.5	1.2	5.1
Total 24 hrs.	1405			10.3		11.1
Intake	1760			8.5		13.5
Balance	355			-2.2		2.4

TABLE 2

Case No.	Liq. Intake	24 Hr. Urine	Nit. Urine	Sp. Gr. Day				Salt		Nitrogen		Condition
				Hg.	Low	Nit. ht	Variation	Intake	Output	Intake	Output	
1.	1760	1405	425	25	12	20	13	8.5	10.3	13.5	11.1	Normal
2	1280	1279	595	21	14	18	7	6.9	9.53	14.2	11.6	Mild Involvement
3	1360	848	540	16	10	14	6	6.9	5.7	12.3	8.6	Moderate
4.	1675	1262	660	11	09	10	2	6.9	4.4	9.0	4.1	Severe

In table 2 are tabulated the findings in four illustrative cases. A study of this table reveals a gradually increasing tendency to nocturnal polyuria and fixation of specific gravity. It is now recognized that these are frequently the very earliest symptoms in

chronic nephropathies. Appreciating this fact Vaughn and others have worked out a modified "Mosenthal" test, the so-called two-hour-renal test, which is of the utmost importance in the early recognition of renal functional disturbances, and which is so simple that it can be carried out satisfactorily by any practitioner of medicine, however remote from a laboratory, provided he can get the co-operation of his patient.

The two-hour-renal test is carried out as follows: The patient is directed to continue his regular dietary, except that a level teaspoon of salt is to be taken with the noon meal, distributed to suit the taste. The specimens are taken in the manner described for the Mosenthal test. The amount and specific gravity of each specimen is then taken. When this simple test is interpreted in accordance with table 3, one has a very accurate index to the kidney function.

TABLE 3

Degree of Impairment	Night Urine		Variation in Sp. Gr. when Highest is			
	cc	Sp. Gr.	18	17-15	14-13	12
Normal	400	18-	9+			
Slight	400-600	16-17	8-5	6+		
Moderate	600	51	4	5-4	6+	
Marked	..	..	3	5-4	6+	
Maximal	..	..	..	3	5-	6+

In the present state of our knowledge the composition of the blood in its non-protein fraction seems to offer the most reliable information as to the functional capacity of the kidneys. Since 90% of the nitrogen intake is eliminated by the kidneys even slight impairment of this function is reflected in the retention of these bodies in the blood.

By comparison of the concentration of non-protein bodies in the blood and urine it is found that the kidney normally has the power to concentrate creatinin one hundred times, urea eighty times, while it can concentrate uric acid only twenty times. This means that creatinin is eliminated with great ease, urea moderately so, while uric acid is eliminated with difficulty. Consequently, when the kidney is involved the uric acid excretion is the first to be affected, urea next, while creatinin is not retained in the blood until there is extensive damage to renal function. Therefore, an increase of the uric acid in the blood is probably the earliest indication of renal pathology, an appreciable increase in the urea nitrogen means a moderate nephropathy while any considerable increase in the creatinin is to be viewed with grave concern. Thus it is seen we have in the blood chemistry a diagnostic method of value, and index to the functional capacity of the kidneys, and a prognostic sign of great certainty.



Table 4 gives the average normal findings and what is considered the upper limits of normal or beginning abnormal for these non-protein nitrogen bodies in the blood.

TABLE 4

	Milligrams per 100 cc. of Blood.			
	Total Non-Protein N	Urea Nitrogen	Uric Acid	Creatinin
	25-30	12-15	2-3	1-2
Normal				
Beginning	35	20	4	3.5
Abnormal				

Table 5 shows the relative values of non-protein nitrogen bodies in various degrees of renal disturbance. It will be noted that in case 1 all the figures are within normal limits; in case 2 the uric acid is increased; in case 3 the uric acid, urea nitrogen and total non-protein nitrogen are increased while the creatinin is within normal; while in case 4 all are increased. With few exceptions a creatinin value of above five means early death.

TABLE 5

Case No	Uric Acid	N. P. N.	Urea N.	Creatinin	Condition
1.	2.5	27.3	14.2	1.07	Normal
2.	6.3	42.3	21.5	1.46	Mild
3.	4.92	48.4	27.1	2.01	Moderate
4.	11.5	106.7	68.3	3.5	Severe

(Note: At the time the examinations of case 4 were made patient was able to come to laboratory. He died soon after in uremia.)

A study of table 6, showing the results of the two-hour-renal test and the nitrogen partition in the same cases, reveals the fact that either test or both may show a positive reaction. We have come to consider a positive reaction with either test, especially if repeated examinations give the same result, as indicative of renal deficiency.

TABLE 6

Case No.	Two-Hour-Renal Test.					Nitrogen Retention			
	Night	Day Urine			Uric Acid.	Non-Protein Nitrogen	Urea Nitrogen	Crea-tinin	
		Am-ount	Sp. Gr.	Am-ount					
1	390	1022	600	1024	1004	3.5	30.3	16.1	
2	600	1018	684	1021	1014	5.21	42.3	26.1	2.11
3	283	1021	408	1022	1020	4.2	40.0	22.3	1.58
4.	600	1014	750	1015	1009		27.3	14.2	
5.	540	1012	800	1012	1010		30.8	15.6	
6.	540	1014	308	1016	1010		63.8	42.7	

Some of our most satisfactory work with blood-chemistry has been in connection with operative procedures, especially prostatic surgery. The tremendous mortality in prostatectomy (20% or more) is due to two factors, uremia and sepsis. We have found that in cases where prostatectomy is indicated there is nearly always a nitrogen retention; we have also found that this nitrogen retention can be reduced in most cases with comparative ease. When the urea nitrogen has reached a point below 20 mgs, and the creatinin is within normal limits we consider it is safe to operate. By following this procedure the mortality in our clinic has been reduced more than half.

## Case Reports

R. K. White man, age 51, entered Hospital complaining of afternoon headaches and polyuria. History of albuminuria and pyuria.

Diagnosis: Cystitis.

Patient was in Hospital less than twenty-four hours. Urine was negative except that night specimen measured 850 cc. Blood showed N. P. N. 42.3 mg; Urea Nitrogen 21.5 Uric acid 6.3; Creatinin 1.46. Patient, who is a doctor, was told he had a mild nephropathy and that he should govern himself according.

E. K. Elderly white man came to Laboratory for blood chemistry. History of convulsions and high blood pressure. Blood pressure at the time was over 200. Blood showed N. P. N. 106; Urea Nitrogen 68; Uric Acid 11.5; Creatinin 3.5. Died a few weeks later in uremia.

L. A. S. White woman, age 51. Symptoms extend over four or five years. Headache, dizziness, melancholia, forgetfulness; one or two attacks of mild paralysis of one hand and face. No gastro-intestinal symptoms; no sclerosis.

Blood pressure 225-100. Day urine 1000 cc; night 500 cc.

N. P. N. 30.2; Urea Nitrogen 15.0; Uric Acid 2.5; Creatinin 1.36.

Diagnosis: Essential Hypertension.

W. D. White man, age 22, entered Hospital, history of having taken several bichloride tablets some hours before. Urine showed heavy albumin and all kinds of casts for many days. On admission blood showed N. P. N. 58; Urea Nitrogen 30; Two days later, N. P. N. 105; Urea Nitrogen 83; Uric Acid 5.7; Creatinin 4.37. Next day creatinin had risen to 7. Nitrogen retention gradually decreased until twenty three days after entering Hospital he was discharged in good condition, with blood showing N. P. N. 29.7; Urea Nitrogen 14.3; Creatinin 2.7. Two months later patient was brought to Hospital for mental condition. At this time there was no evidence of renal disturbance. This is the only case I have seen with a creatinin above 5 milligrams to recover.

A. C. S. White man, age 63, admitted to Hospital complaining of dyspnea. Legs edematous; blood pressure, systolic 205, diastolic 110; large heart; urine negative for albumin and casts.

Provisional Diagnosis: Essential Hypertension.

Night urine was greater in amount than day; blood examination showed urea nitrogen 59.

Diagnosis changed to chronic renal disease with hypertension.

Patient put at rest, given eliminative treatment and a non-protein diet, and within

three weeks blood pressure was 145 over 90, non-protein nitrogen and urea nitrogen in the blood approached normal and patient was discharged with instructions to take only vegetable proteins, and to report at the laboratory twice a week for blood tests. Blood pressure and nitrogen retention rapidly rose. He was again placed on non-protein diet until blood was normal. Careful quizzing brought out the information that he had always eaten great quantities of vegetables, but little meat. He was given small rations of lean meat, and it was found that he could tolerate it. Patient has been working for the last year and has been comfortable as usual.

This case brings out two important points:

1. The difficulty of a differential diagnosis between Essential Hypertension and renal disease with hypertension; and

2. The use of blood chemical examinations as a guide to treatment.

B. T. White man, age 25, entered Hospital November 27 for relief of asthma. History of having been gassed while in France.

Provisional Diagnosis: Uremia, hypertension and bronchitis.

In the course of ten blood chemical examinations the Nonprotein nitrogen varied between the limits of 92.0 and 166.5; Urea nitrogen varied from 47.6 to 107.3; Uric Acid from 6.2 to 7.3; Creatinin from 6.1 to 16.0.

After administration of thyroid extract, one grain three times a day for three days the non-protein nitrogen rose to 303.6, the urea nitrogen to 279.4 and the creatinin to 15.0 without symptoms of uremia. After the thyroid was stopped the blood nitrogen fell rapidly to its former level.

The two-hour-renal test showed: Day urine 602 cc. specific gravity 1009 to 1012; night urine 660 cc. specific gravity 1010; marked salt and nitrogen retention.

Phenolsulphonphthalein negative for sixty hours on two tests.

Patient was never comatose during his two months in the Hospital.

This case is interesting in several points:

1. Altho this patient had a nitrogen retention well within the uremic class he lived for months without symptoms of uremia.

2. There was a failure to eliminate phenolsulphonphthalein for sixty hours on two occasions, altho he was passing from 1000 to 1200 cubic centimeters a day.

3. Nocturnal polyuria and fixation of specific gravity at a low level was marked.

4. Altho patient was on a low protein diet for the entire time there was no noticeable amelioration of symptoms or change in blood.

## Conclusions.

1. Kidney functional tests are of value in detecting deficient renal function, indicate the extent of functional derangement, enable one to direct treatment intelligently, and form the basis for a more accurate prognosis.

2. They do not enable one to make an accurate anatomical diagnosis.

3. Nocturnal polyuria and fixation of specific gravity at a low level as revealed by the two-hour-renal test are important factors in early diagnosis.

4. The non-protein nitrogen of the blood is a very accurate index to the functional capacity of the kidneys. Uric acid retention is perhaps the earliest symptom of renal pathology, while appreciable increase in creatinin is of grave import.

5. Blood chemical findings are an index to a patient's ability to undergo a surgical operation. This is especially important in surgery of the urinary tract, and should be made a routine before prostatectomy.

6. Some cases of renal disease will respond to one functional test and not to another; therefore, more than one test should be made to safeguard the life of the patient.

(1). MOSENTHAL DIET. All food must be salt free from the Diet Kitchen. Salt for each meal will be furnished in weighed amounts.

All foods or fluids not taken must be weighed or measured after each meal and charted in spaces below. Allow no food or fluid at any time except at meal times.

Note any mishaps or irregularities that occur in giving the diet or in collecting the specimens.

## BREAKFAST

Boiled Oatmeal .....	100 gms.
Sugar .....	1-2 tsps.
Milk .....	60 cc.
Bread .....	60 gms.
Butter .....	20 gms.
Coffee .....	180 cc.
Sugar .....	1 tsp.
Milk .....	40 cc.
Water .....	250 cc.

## DINNER

Meat Soup .....	180 cc.
Steak .....	100 gms.
Poratoes .....	130 gms.
Green Vegetables .....	100 gms.
Bread .....	60 gms.
Butter .....	20 gms.
Tea .....	180 cc.
Sugar .....	1 tsp.
Milk .....	40 cc.
Water .....	250 cc.
Pudding, tapioca or rice .....	110 gms.

## SUPPER

2 eggs cooked any style .....	
Bread .....	60 gms.
Butter .....	20 gms.
Tea .....	180 cc.
Sugar .....	1 tsp.
Milk .....	40 cc.
Fruit .....	100 gms.
Water .....	300 cc.
Breakfast 8:00 .....	
Dinner 12:00 .....	
Supper 5:00 .....	

8 A. M. No food or fluid is to be given during the night or until 8 o'clock next morning (after voiding) when the regular diet may be resumed.

Patient is to empty the bladder at 8 A. M. and at the end of each period as indicated below. The specimens are to be collected for the following periods in properly labeled bottles.

8 A. M. to 10 A. M., 10 A. M. to 12 Noon, 12 Noon to 2 P. M., 2 P. M. to 4 P. M., 4 P. M. to 6 P. M., 6 P. M. to 8 P. M., 8 P. M. to 8 A. M.

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#### THE PATHOLOGY OF NEPHROPATHY

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In the beginning of the discussion of the pathology of the kidney in those conditions known as nephritis, the first thing that is necessary is to have a clear understanding as to what we mean by nephritis, because, at the present time, there are a number of very different pathological processes listed under the head of this one term. Some of these are true inflammations due to the presence of some agent, biological or otherwise, that would produce inflammations anywhere in the body, there is a condition usually spoken of as diffuse nephritis, characterized by the usual pathological signs of inflammation—hyperemia and exudation, in which the etiology is not at all apparent; and there is a class of pathological conditions, which, by the way, are the most common and most frequent pathological processes of the kidney, which are also called nephritis but in which there are very few, if any, of the usual signs of inflammations and which are evidently due to pathological conditions elsewhere in the body, the kidney lesions being due to the increased or unusual functional demands on these organs rather than to any pathogenic agent attacking the kidneys themselves. For example, conditions arising in the kidney during an attack of acute febrile disease, such as tonsillitis, or a more general condition such as typhoid fever, or from such conditions as superficial burns or asphyxia. Different students of pathology of the kidney have attempted to indicate this latter class of conditions by applying terms other than nephri-

tis, such as nephrosis and nephropathy. These terms have not been generally used partially because they are new and partially because they are not sufficiently different from the old terminology to be attractive, but their use indicates the general feeling of pathologists that there should be some term to express this class of conditions other than that used to indicate true inflammation. However, by whatever name we may call these conditions, their seriousness and frequency are just beginning to be recognized and the question as to their true character is one about which everyone is at present seeking information. This paper is presented for the purpose of expressing the conclusions of its author from a rather extended study of these lesions in the hope that it will, in some measure, help to give practitioners in general a more definite idea as to what is taking place in the kidney under these circumstances.

A brief statement of the case would be that these nephropathies are a condition of temporary degeneration followed by various progressive processes but ultimately resulting in permanent reduction of functional ability of the kidney. But this brief statement is not at all satisfying and we would all like to know in greater detail just what is taking place in the various stages of the condition and get a clearer picture of the end result.

Such a picture will be somewhat as follows: first of all, there is a hyperemia of the kidney which is not due to the pathological condition of the kidney itself but because of an increased functional demand on these organs. This hyperemia is manifested in the vessels of the glomerular tuft and other vessels of the kidney. Along with this we find a swelling of all the cells of the glomerular epithelium, of the capsule and the convoluted tubules. The swelling of the glomerulus may be so intense that the tuft fills the capsule and even stretches the latter and the swelling of the tubular epithelium may be so great as to close the lumen of the tubule. This is the usual picture of a real, acute nephropathy usually known as acute parenchymatous nephritis. Understanding that these conditions are present we can easily understand why there would be a reduced output of urine which is found, as you all know, in these acute cases. As the condition progresses the hyperemia will subside to a greater or less degree and the cellular elements of the uriniferous system will undergo various forms of cloudy swelling, with erosion, desquamation and fatty degeneration to some extent of the epithelium of the tubule. Under the microscope the picture of this stage will be that of a somewhat enlarged glomerulus with apparently enlarged tubules in which the



increase is not actual but apparent and is due to the erosion of the epithelium increasing the diameter of the lumen, the sub-capsular space and the lumen of the tubules will be more or less filled with a granular deposit. This may be taken as the end of the acute stage. It is followed by various reparative and regenerative processes. The tubular epithelium regains its normal appearance, desquamated cells are replaced by hyperplasia of neighboring cells, the hyperemia subsides to the normal blood supply and glomerular epithelium regains its normal appearance. But right here in this reparative process occurs a phenomena which finally results in a chronic kidney such as was first recognized and described by Bright, a condition which has long given the medical profession the idea that nephritis is essentially a fatal disease. This process is a fibrosis of the glomerular tuft or of the capsule or both. This fibrosis, in some degree, is present in all glomeruli that have been the site of acute nephropathy. The first result of this condition and the least delaterious result is a thickening of the walls of the capillaries of the glomerular tuft. But what is more serious is that because of the presence of certain substances like albumen that are retained or that have been deposited in the acute stage between the loops of the tuft or in the capsule there is a stimulus to a greater or abnormal amount of connective tissue growth in these regions, and especially between the loops of the tuft, or beneath the capsule, and between the tuft and capsule. It is easy to see that the glomerulus, in this condition, is less able to function than a glomerulus in which the capillary walls alone are thickened, but the sad part of it is that once this inter-capillary or sub-capsular fibrosis is started it continues to increase until the glomerulus is entirely thrown out of commission because it is reduced to a mass of connective tissue. In some glomeruli the larger portions of this fibrosis will be sub-capsular. In the case of others the larger portion will be inter-capillary, in some cases both types of fibrosis occur in about equal amount. The end result in any case is the same, a non-functionable glomerulus.

If we turn now for a moment to consider the physiology of the kidney we will realize the effect of this condition on kidney function, for, whatever theory of urine production appeals to us individually as the most logical, we will agree on one point and that is that urine production begins in the glomerulus, therefore the glomerulus that has been reduced to connective tissue cannot do its part in urine production and that particular system is forever thrown out of participation in the production of urine and the total reduction in functional capacity of a kidney therefore depends upon

the number instances and extent of fibrosis of the glomeruli. Turning now to consider the blood supply of the uriniferous tubules we will see the effect of this condition on the rest of the uriniferous system. It is scarcely necessary for me to remind you of the fact which is common knowledge to you all, viz. that the blood supply of the kidney tubule, at least of the convoluted portion passes through the glomerulus; therefore, with the fibrosis of the glomerulus the blood supply of the convoluted tubule is entirely shut off or reduced to such a point that continued function of the tubules involved is impossible and there results the same condition that would result in the other parts of the body under similar circumstances, namely, atrophy of the tubule. The process described above is not one which begins at any definite age of the individual but is one which occurs with every case of nephropathy no matter how young the individual is. It is not a process which once started continues without provocation but is one which accompanies every acute attack of nephropathy which occurs in any infection or condition which will suddenly throw into the blood stream a large amount of toxic or metabolic products to be eliminated. Every acute case of nephropathy at least of any severity results in the loss of a greater or less number of uriniferous units in the manner described above.

But this is not the whole story. When the loss of functional units is reduced a considerable number, there begins in the more normal tubules remaining a compensatory hyperplasia in order to keep the functionability of the organ up to the normal or safely above the physiological minimum. This hyperplasia has four distinct characteristics. First of these is the increase in the size of the glomerular tuft and capsule of Bowman and by a change in the character of the epithelium in part of the proximal tubule to assist in glomerular function. Second is an increase in length of the proximal convoluted tubules, and third, an increase in diameter of the proximal convoluted tubule in which case the epithelium retains its normal thickness and appearance. A transverse measurement of the tubule shows that the result is an increase in the diameter of the lumen which increases the surface of the epithelium which in all cases of glandular tissue is the all important thing. Fourth, an increase in the length and diameter of the descending arm of Henle's loop which is now known to be an auxiliary of the proximal convoluted tubule. There is very little change in the thin portion of the loop and the distal system composed of the ascending arm of Henle's loop and the distal convoluted tubule. An idea of the extent of this compensatory hyperplasia can be gotten when we realize that some of these

hyperplastic tubules judging by a comparison of the surface of the epithelium have the functional capacity of nine normal tubules. It can also be gotten when we realize that in some cases of chronic nephropathy the total weight of kidney substance may be reduced to one-third or less the normal amount and when we further realize that a considerable portion of this reduced weight is composed of fibrosed glomeruli, atrophied tubules and increased connective tissue so that the total number of functional tubules may be reduced to less than a tenth of the original number present in the kidney.

There still remains another chapter to this story, and it is this, these hyperplastic tubules which are carrying on the function of the tubules that have been lost through previous nephropathies are themselves as susceptible to the same conditions as were the original tubules, therefore in examining chronic kidneys we frequently find tubules which have undergone considerable hyperplasia and have suddenly become victims of nephropathy and are lost by the wayside, throwing a greater burden on those that remain. We also find, in some instances, that these hyperplastic tubules have become dammed up by the formation of a cast and the cast has increased in size until it entirely fills the tubule to the glomerulus resulting in an atrophy of the tubular epithelium because of pressure from within and resulting in a functionless structure and we have a picture that has long been labeled chronic, interstitial nephritis, a picture composed of a few tubules increased in diameter and between them masses of tissue composed of fibrosed glomeruli, atrophied tubules and connective tissue.

Some students have attempted rather elaborate classifications of nephropathies using such terms as cysto-glomerular, characterized by connective tissue bands between the capsule and the tuft; capsulo-glomerular nephropathy, characterized by thickening of the capsular walls; inter-capillario-glomerular nephropathy, characterized by connective tissue between the loops of the tuft; tubular nephropathy in counter distinction to glomerular-nephropathy. In the opinion of the author such classification is not only valueless but untrue to the facts in the case for the reason that any student of kidney pathology recognizes the fact as stated by every writer on the subject that in glomerular nephritis the tubules are also involved and in tubular nephritis a glomerulus is involved and while some pathologists state that salts of antimony will produce a tubular nephritis and cantharidin and snake venom produce a glomerular nephritis they also state that in all cases where one part of the uriniferous system is involved the other

part of the system is also involved. In every case where there is a fibrosis of the glomeruli, in the same kidney will be found instances in which the fibrosis was principally subcapsular and other instances in which the principal fibrosis was inter-capillary. Furthermore it is not uncommon to find instances of these two types of glomerular fibrosis in which the glomeruli received the same blood supply from the same cortical artery and in which the lesions are apparently the same age, indicating that they occurred at the same time, and it is the opinion of the author that these various classifications designate stages or variations of the same process rather than different processes, and we would be as much justified in classifying lobar-pneumonia as congestive-pneumonia, exudative-pneumonia and fibrotic-pneumonia as to classify nephropathies under these various types as mentioned above. In the opinion of the author there are but three justifiable types of nephropathies that can be used. These are acute, sub-acute and senile. Understanding of course that there may be an acute exacerbation in an otherwise chronic kidney and an acute attack of nephropathy in a senile kidney, but the point is that the lesions of this disease are confined essentially to the parenchyma resulting in a temporary reduction of functionality in the acute cases and ultimately resulting in a permanent reduction of functionality, owing to a reduction in the number of functional units of the organ. I wish to emphasize several facts in the pathology of the kidney in nephropathy, first, it is a condition characterized in acute stages by degenerative changes of greater or less severity. Second, it is a process that does not occur with equal intensity throughout both kidneys or in all parts of one kidney. Third, that every acute attack of nephropathy results in permanent loss of some of the functional units of the kidney. Fourth, it is a condition confined to the parenchyma of the kidney. Fifth, that the all important thing in the end result is the interference with the circulation of the uniferous systems.

### Discussion

*Dr. Chas. W. Fisk, Kingfisher:* When I commenced the practice of medicine, albuminuria was considered pathonomic of Bright's disease, and conversely, the absence of albumin was considered proof that there could be no organic disease of the kidney.

When the use of the microscope became more general, we recognized it as a valuable addition to our means of diagnosis. But we find severe cases of Bright's disease, using the old term for disease of the kidneys in general, which show little or no albumin and few or no casts. The blood pressure examination has



come into general use and for a time promised to clear up the diagnosis in doubtful cases in nephritis. But we find severe cases of nephritis with low blood pressure and high blood pressure with no evidence of kidney complications.

This excellent and carefully prepared paper of Dr. Riely's demonstrates that we must depend to a large extent on the functional tests of the kidney if we expect to gain a knowledge of these obscure defects of the kidneys.

We find many cases of albuminuria with no symptoms of uremia, again we find eclampsia and other manifestations of uremia coming like a bolt from a clear sky.

A careful study of the functional activity of the kidneys will give us evidence of early disease that we can discover in no other way, and must be of great value in making a diagnosis and calculating the prognosis. This subject is becoming of much more importance because we see so many more patients with disease of the kidneys. It is probable that we look for it more frequently. We have always watched for evidence of nephritis following scarlet fever but never thought of looking for this complication in tonsilitis.

In cases of albuminuria following pneumonia and other infections we shall be obliged to resort to a more general use of the tests of functional activity of the kidneys if we are to gain a knowledge of the real damage that has been sustained.

*Dr. Gayfree Ellison, Norman:* I want to say a few words about this simplified organic chemistry that Dr. Langston has brought out. Especially call to your attention the two hour kidney function test. When we read about blood chemistry and the very elaborate examinations that are necessary in order to make a diagnosis of kidney function, the general practitioner in the smaller towns and men in the places where expert chemists are not available, feel that they are handicapped. The doctor has, however, pointed out the simplicity of such tests. The two hour test can be performed by any one. It would be easy to give a definite amount of food or add some chloride to the regular diet, then estimate the kidney function by these simple tests of day and night quantity and specific gravity. I believe the general practitioner should pay more attention to his patients after acute tonsilitis and other infectious diseases. We should be more careful in the examination of our patients before they are discharged. Impaired kidney function frequently dates back to some minor disease, which, if properly managed for a few weeks during convalescence would have prevented the serious trouble. After all, comparatively little of the real by-products of the food we take, the waste ma-

terials of metabolism, are eliminated through the bowels. The function of the bowels is to eliminate the excessive amount of food taken in and carry away undigestible material. The real chemistry in the body takes place in the blood and tissues and the waste material from the blood appears in the urine. Therefore, it seems to me that this paper points out a way by which we can render more efficient service to our patients.

*Dr. T. H. McCarley, McAlester:* In a recent contribution to the "Medical Clinics of North America" Mosenthal states that, in making the kidney function test which bears his name, he now makes no change in the diet to which the patient is accustomed. The idea is to know how the kidney is keeping up to its work under the conditions to which it is subjected in the every day life of the patient. This variation from the original technic of this test has the further advantage of added simplicity. As suggested by Dr. Moorman, the simpler our functional tests are made, the greater will be the number of doctors using them and greater will be the number of people benefited thereby. Dowden of Louisville at the 1919 meeting of the Southern Medical Association reported a long series of cases in which the clinical findings from a modified Mosenthal test closely paralleled the facts obtained by the more elaborate methods. He called attention to the fact that not more than one tenth of one per cent of all physicians are familiar with the tests requiring blood chemical methods. Does it not follow that a great service can be rendered our profession, and through them the people of our State, by teaching them to use and interpret properly the simplified Mosenthal test?

*Dr. J. T. Martin, Oklahoma City:* These papers are of peculiar interest to me for two reasons. First, the timeliness; in that I believe the great steps in medical advance in the near future will be along the lines of these papers, degenerative diseases of heart, kidney and blood vessels. Dr. Riely's paper appealed to me especially because he opened the discussion of diagnosis of these cases. There are a number of us that see many cases we can not place, yet we know that the pathology is in or around the kidney, that these are cases of pathologic physiology of kidney function without the usual symptoms of anatomic pathology.

One case I saw this winter is of this class. I made a diagnosis of hyperemia of the kidney, which Dr. Turley says is incorrect, but this man was a healthy young fellow exposed to wetting on a cold day which was followed by a complete suppression of urine and he was totally unconscious for a period of forty-eight hours. A young man in the prime of life—



around thirty years old—the blood pressure was not especially elevated but he was in a serious condition with the kidneys at fault. I called it congestion of the kidneys. On going over his history, it was found that he had Flu-Pneumonia while in the army and this was accompanied by an empyema which drained for a long time and ceased about a year previous. It is pleasant speculation as to the effect that this empyema could have had on his later kidney disturbance and also of more or less interest to the Compensation Board.

I was very much interested in hearing Dr. Turley discuss the newer pathology and inform us that the pathology we learned at school could not answer to us the things we have learned clinically of the kidney and that we would have to re-learn our kidney pathology. I would like very much further papers along this line and to hear more from Dr. Turley at later dates on this new pathology of kidney conditions.

*Dr. Riely*, closing: Somebody asked Osler one time, what the secret of longevity was. He replied that to have a chronic disease and to continually nurse it. He wrote a paper in 1901 on the advantage of having a small amount of albumin and a few casts in your urine. He implied that one who continually looks after himself with nephritic conditions generally lives to be of ripe old age. While those of us who go on unmindful of our health and break all the laws of nature, die early, generally.

It is quite accurate in getting at a prognosis of these cases when you go into a careful and thorough study of them.

Those classed, as Dr. Balyeat has said, as cases of essential hypertension or Hyperpiesis generally live out of normal expectancy and should not be worried about their hypertension.

Dr. Moorman spoke about their not having a laboratory to correlate with chemical symptoms. The laboratory is a very good and necessary adjunct but your history taking is most essential. A man who is not a stickler for details in history taking misses the main points in a diagnosis.

Drs. Turley, Moorman and myself visited Dr. . . . clinic last spring and he showed us some observations he was making. He had one case of chronic or gouty nephritis into whom he poured 10 liters of water through a Reyfus tube from 8 A. M. to 8 P. M. and his patient weighed ten pounds more in the evening than he did at the beginning of the experiment. His weight was normal the next morning, however. In a man with a normal kidney, the water ran right through and his weight was not increased.

*Dr. Langston*, closing: I just want to emphasize the importance of the Two-hour-

Renal Test from the standpoint of the general practitioner, who does not have access to the laboratory. It is so simple that it can be used by any one. The necessary equipment consists of a measuring glass and a urinometer. The information obtained is of the utmost importance. In our institutional work, we carry out parallel tests, the phenolsulphonethalein test, the Two-hour-renal Test and the blood chemistry tests, and in most cases, we get quite as much information from the two-hour test, as we do from the others, and we think it is more reliable than a phenolsulphonethalein test.

With reference to this, as with laboratory work in general, I would like to say that the functional condition of the kidneys, as revealed by the laboratory tests, should be taken as additional symptoms in your symptom complex and properly evaluated in making up a diagnosis; and however inconvenient it is, when the welfare of the patient depends upon it, there should be no excuse for not carrying out these examinations.

*Dr. Turley*, closing: I just want to emphasize the correction of a mistaken notion in regard to nephropathy, to the effect that it is a chronic condition which sets in at a definite point or time and continues constantly and progressively to a fatal termination, just as, for example, an infectious disease might. As a matter of fact it is a condition which begins with the first fever, toxicosis, or any condition in which a sudden super-normal demand for elimination is made on the kidney. Nephropathy is such a common thing that we are all victims of it to such an extent that you will rarely find an autopsy in which there will not be some kidney pathology. This is true to such an extent that none of us have ever seen an illustration of normal human kidney in any textbook. In my own experience in a course of examining something like 1700 kidneys I have found just one that was a normal organ. Another mistake is to attempt to correlate the clinical findings with a pathological picture for the reason that there may be a chronic condition present and at the particular time examination is made there will be an acute condition superimposed on the chronic one. Another point I wish to emphasize is that the all important thing in nephropathy is what happens to the blood vessels, especially of the glomeruli, for the reason that the supply of the remainder of the uriniferous system or at least the larger part of it, passes through the glomerulus; therefore, if it is shut off at this point the remainder of the uriniferous system is automatically thrown out of function or ability to function.

## THE TREATMENT OF OBLIQUE INGUINAL HERNIA\*

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In his book on hernia which was published in 1907, Ferguson described no less than 41 operations for inguinal hernia. Since that time several other operations or modifications of operations have appeared in the literature. Ferguson sought to describe what he claimed to be the anatomic or typic operation. It must be admitted that he succeeded in popularizing a method which differed largely from other methods in that the cord was not transplanted and this is the feature which typifies what is now generally known as Ferguson's operation. Other surgeons have also described operations differing in some respects from Ferguson's and in minor ways only possess evidences of originality. These operations as methods of procedure are rapidly being forgotten and today whenever an operation is performed in which the cord is not transplanted it is almost universally described as Ferguson's or a modification of Ferguson's method.

But in spite of the fact that Ferguson's operation restores the parts of inguinal canal to their normal relationship, that the operation is most simple and easy to perform, that the percentage of recurrences are reduced to the minimum; that injuries to the cord and its structures cannot occur, and that pain and inconvenience to the patient is no more than in other methods, there remain quite a large number of surgeons who adhere to that form of operation which is characterized by a transplantation of the cord—and which is generally known as the Bassini or a modification of the Bassini operation.

What the facts were that influenced the originator of this form of operation, or by what logic the present day surgeons convince themselves that cord transplantation is the best method the writer does not know. It would be the boldest of empiricism to say that because a hernia occurs with the cord in its normal position it must be treated by placing it in an abnormal position.

There are two main theories, each of which attempt to explain the etiology of inguinal hernia. One theory holds that it is due to the failure of the funicular process to close. The other theory (Ferguson's) admits the failure of the funicular to close and claims that this failure is due to a deficient origin of the internal oblique muscle from Poupart's ligament. All other factors which are advanced as of etiologic importance remain permanent even after operation by whatever method. They will not be considered.

\*Read before Oklahoma City Academy of Medicine, January 1921.

The anatomic operation removes the sac, for it is a superfluous structure, restores the rotundity of the peritoneum opposite the internal ring and corrects the defective relationship between internal oblique muscle and Poupart's ligament. We subscribe to the statement of Ferguson who in speaking of transplanting the cord, or raising it out of its bed said: "In more cases than has been recorded the testicle has come to grief by this unnecessary procedure. Tearing the cord out of its bed is without any anatomic reason to recommend it; any physiologic act to suggest it; and etiologic factor in hernia, congenital or acquired, to indicate it; or brilliant surgical results to justify its continuance. Let the cord alone, especially the vas deferens, for it is the sacred highway along which travel the vital elements indispensable to the perpetuity of our race."

Accepting, therefore, the distinguishing feature of the Ferguson operation as fulfilling the anatomical requirements without in any way disturbing the physiological activities of the structures involved in the cure of inguinal hernia, there remains but the task of working out the details of the steps by which the operation may be most easily and satisfactorily performed.

### The Operation

In order to meet all conditions an operation for hernia must be capable of satisfying at least four requirements:

1. It should promise a maximum of cures, which implies a minimum of recurrences.
2. It should be performed with the least possible injury to adjacent structures which have important function.
3. Surgical morbidity, and inconvenience and suffering of the patient during convalescence must not be excessive.
4. The technical execution of the operation must be such that it can be easily mastered by the average surgeon.

An operation is, therefore, here briefly described which is offered as one fulfilling all the requirements just enumerated.

### The Incision

Free and wide exposure of the field of operation is absolutely essential. This is admirably accomplished by the long curved incision as illustrated in chart 1. It begins about one inch internal to the ant. superior spine of the ilium, passes almost directly downward until it has reached the level of Poupart's ligament and then curves inward to end near the midline over the pubic bone. With gauze or a blunt dissector all fat and fascia is cleared from the external oblique, from Poupart's ligament to well over the border of the rectus sheath. The

external oblique aponeurosis is now split, in the direction of its fibers upward and outward, sufficiently high to expose well the internal ring. This splitting is begun at the innermost pillar of the external ring. If scissors are used one must avoid cutting a nerve which is found on the surface of the muscle underneath the aponeurosis in the lower portion of the split.

One or two strokes with the handle of knife or blunt dissector serves to free the flaps of the external oblique from adjacent tissues. With these flaps retracted, gently the cord, the shelving edge of Poupart's ligament and the internal oblique and conjoined tendon come plainly into view.

### The Spermatic Cord

If the patient is young and particularly if he is muscular, the covering of the cord is decidedly muscular in appearance. At any rate this covering is a distinct layer of tissue and is treated as such. It is picked up and a slit made in it between forceps, this slit is enlarged with scissors in the direction of fibers, one or two inches. The flaps thus made in the cremaster and fascia are seized by Allis forceps and retracted. The hernial sac and perhaps veins now come into view. Rarely is it necessary to clamp a small bleeding point where the cremaster is slit. The sac is grasped with tissue forceps and by means of dissecting scissors and tissue forceps freed from the structures of the cord. As the separation of the sac from cord proceeds upward and approaches the internal ring, gauze covered finger should replace scissors and forceps, for in this region the vas is in intimate contact with the sac but can be easily and safely pushed off with the gauze covered finger. The sac being freed well on to the parietal peritoneum it is transfixied ligated and redundant portion cut away. The slit in the cremaster is now repaired by means of two or three interrupted sutures of fine catgut. At no time has the cord, as a whole been torn from its bed.

### The Closure

In young children no suturing of internal oblique is done. In older children and adults from one to four mattress sutures of 20 day cat gut approximate the internal oblique and conjoined tendon to Poupart's ligament. These are so placed that the knots will be on the outer surface of Poupart's. These sutures are all placed whenever multiple, before any are tied, and they naturally pass external to the cord. They are tied from above downward, and the assistant gently depresses the cord with a blunt instrument as each suture is being knotted. After the last and lowermost suture has been tied the surgeon passes his hands through the solutions preparatory to putting his finger

into the wound for the first and only time. The space through which the cord emerges below the last suture should admit the tip of the little fingers up to the first joint. If the finger would freely pass further than this joint another suture should be placed; or, what is more important, if the tip of the finger will not pass in without using considerable force, the lowermost suture must be removed.

By continuous suture the inner flap of the external oblique is next brought to Poupart's ligament and the outer flap imbricated over the inner by continuing the suture back to the point of beginning.

In little children the only buried suture used is that which closes the external oblique. The closure of the incision is by 3 to 5 silk-worms which pass through all structures down to the external oblique. If the skin margins require coaptating this is accomplished by a few interrupted sutures of fine catgut which are not inserted deeper than the skin itself. Attention is called to the fact that while the skin incision is a long one, the dressings, as usually placed, entirely shuts it off from post operative exposure, and contamination. A straight incision of sufficient length to give ample exposure for the operation would pass so low as to become exposed each time the patient flexes his thigh, with the ordinary dressings, only, to cover it.

### Fulfillment of the Requirements for Treatment.

1. In an experience of more than five years during which time this operation has been employed to the exclusion of others no recurrences have been reported to the operator.

The failures, if any there be, have rightly gone to another whose promise of a cure they would prefer to accept than that of one who had fallen down. But five years is not time sufficient for one surgeon whose patients with hernia have not numbered into the thousands, to lay down a scheme or standard backed by an insurmountable wall of figures and statistics. However, the essential part in the closure of the hernia in this operation is the Ferguson method as modified by the Andrews imbrication.

This operation compares favorably as regards percentages of cures with other methods.

2. If there is any feature of this operation which recommends it above all others, it is in its fulfillment of the second requirement. The Spermatic cord is the structure, the impairment of which is too frequently observed following the Bassini operation. In order to



transplant the cord it, naturally, must be torn from its bed. How much injury is inflicted to blood vessels nerves and vas, during the process of rolling it, pulling apart and tearing here and there as often is done, when looking for the sac or trying to isolate the vas, depends on the gentleness, or roughness, of the operative manipulations. Be this injury what it may, insult is added to injury by placing the cord, or what is left of it, in a strange new position and suturing it tightly there. The patient may cease to talk about the pain he had or may forget the swelling of the testicle that was present while in bed following the operation, thinking at the time that these were unavoidable sequences of operation. But the tell-tale atrophy of the testicle and painful or at least sensitive thickened epididymis which follows and persists in the years to come speak in tragic tones of injury that can never be overcome. The master surgeon and surgeon anatomist may be able to use Bassini's method and get by without these unfortunate results, but the average surgeon, it appears, is not able to do so. A swollen, or painful, testicle has not been observed as following the operation for hernia as herein described.

3. Pain has its significance, a persistent violent pain following an operation for hernia is an indictment of the operation.

If sutures have been placed so as to co-apt tissues rather than to strangulate them the pain in the wound will not be over severe and will soon disappear.

This operation has never been followed by a complaint of pain in testicle or cord. The few instances in which any pain of significance has been present, have been individuals where sutures have been placed and tied under tension in the fascia. If sutures have been properly placed, tension can be avoided. The amount of pain and inconvenience which a patient, therefore, suffers following this operation cannot be more, and indeed should be less, than that suffered in other operations.

4. The detailed description of operation in the subject matter and the charts showing several steps of the operation, which are herewith submitted, clearly show, it is hoped, that the operation presents no technical difficulties interfering with its ease of performance at the hands of the average surgeon. It does require that the surgeon must have respect for tissues, both as to structure and as to ability to tolerate abuse.

In conclusion let it be confessed that a standard operation for indirect inguinal hernia is very much to be desired. Such an operation if properly described should permit of sufficient latitude as not to stifle originality in a given

operator. The operation herein described is not proposed as a standard by any means. Neither is it offered as an originality. But it is merely a suggestion offered as being an operation which utilizes good points in various operations and with few or none of the bad points so far as observations on a limited number of patients have shown.

## TREATMENT OF PARALYSIS ATTENDING MINOR NERVE INJURIES\*

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This brief paper will deal only with treatment of transient paralysis attending lesser nerve injuries, such as contusions, compressions, over-stretching of nerves etc.,—not touching on that class in which we have complete solution of continuity of a nerve or nerve trunk.

Among the more common cases of compression we may mention, Crutch Paralysis, Saturday Night Paralysis, Sleeping Palsies; and among more severe type may be found incorporation of nerves in callous formation in healing of fractures; firm cicatricial tissue and from pressure of some form of neoplasm.

In birth palsies we find the more common type over-stretching, though this may be severe enough to cause complete severance of the nerve or nerve roots.

In this class of cases the muscles may show a marked hypotonia, but complete loss of tone does not exist, neither do we have the degeneration changes in the nerve that attend complete severance of a nerve, and for want of a better term, we might call the condition one of nerve disorganization.

The cause having been removed, recovery may be expected in a period of time, ranging from a few days to weeks, or even months; the time necessary for the reorganization of the nerve and restoration of the involved muscles to full competency.

In the treatment of these conditions the principle of rest should be strictly observed. Not simply advising non-use of the member, but rest enforced by proper supportive measures, of which a well applied light plaster splint offers the best.

### Case Report

C. S. Age 18. Gate-Keeper-Refinery. While engaged carrying one end of heavy timber his fellow-workman carrying the opposite end, dropped his end, thus causing a sudden downward traction on patient's right shoulder. Consulted doctor, who pronounced the condition one of severe strain. Returned to work at end of one week, but, because of severe pain involving shoulder and arm, consulted another

physician who made diagnosis of fracture of shoulder. Seven weeks following injury examined by third physician, who made tentative diagnosis of Brachial Plexus injury. Was given massage, and advised to use the arm as much as possible. X-ray at this time disproved fracture and dislocation. Came into our service, October 17; five and one-half months after injury.

**Examination:** October 14: Muscles of entire shoulder girdle, right side, also right arm and fore-arm, slightly atrophied and flaccid from non-use. Right scapula winged. Right shoulder droops so that acromion process is on a plane two inches lower than that of left side. Patient unable to raise arm or flex fore-arm. Has some use of fingers, but all muscle action is very weak. Marked hypotonia, yet not complete loss of tone in any of the muscles.

**Diagnosis:** Injury to right Brachial Plexus. Prognosis must be guarded yet may be considered favorable and treatment will continue over a long period of time.

**October 18:** Spica plaster was applied from fingers, to and including chest. Position as follows: *Hand dorsi-flexed, fore-arm flexed to about sixty degrees; arm abducted to about one hundred degrees.*

This cast was worn very comfortable for about twelve weeks. At end of eight weeks patient could move fingers very freely.

At time of removal of cast:—Muscle action fair, with seemingly complete return of nerve function. Gentle massage, passive motion; mild electrical stimulation was resorted to. The case progressed nicely until the present time, the cure is quite complete. The patient has normal use of arm and shoulder.

In the case just recited the injury was perhaps a combination of contusion of some cords of brachial plexus as well as over-stretching, more particularly the fifth and sixth nerve roots.

Birth palsies should be treated in a similar manner, though we would not advise the extreme position as practiced in this case. Possibly the position occupied by child in utero with arm and fore-arm flexed across chest would be best.

The nerves most frequently involved in type of injury under consideration are the radial as it winds around humerus; the ulnar as it passes through the interval between the olecranon and medial condyle of humerus and common peroneal nerve as it winds about the neck of the fibula.

In treating these various conditions the mechanical appliances must be those that will secure the most complete relaxation to the muscles involved. If these can be so applied as to admit of gentle massage, electrical treat-

ments or any measures usual in the treatment of these conditions, without disturbing condition of rest, they will aid in keeping up muscle tone and perhaps hasten complete recovery, but they should not be practiced at the expense of disturbing the relaxed position of the muscles during the period of nerve reorganization.

### Discussion

*Dr. W. K. West, Oklahoma City:* Dr. Smith asked me to say something about the subject this afternoon but I did not know I was to discuss the paper. I heartily endorse all the doctor has said in regard to rest of the muscles. There is one more thing I want to say in regard to birth palsy, not only to provide muscle rest but to provide it in a position which will prevent deformity. Just as soon as a diagnosis has been made on cases of this kind there should be some kind of appliance provided to hold the arm in the proper position. When the child is brought in early they are provided with continuous wire bandages.

## FUNCTIONAL DISTURBANCES OF NERVOUS SYSTEM. DUE TO PELVIC REFLEXES AND ANOMOLIES OF THE INTERNAL SECRETIONS

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Realizing the great importance of my subject and inability to do it justice, I approach it with hesitation, but there are a few observations I wish to record, as the medical literature is meager on the subject.

You can find a complete discussion on pelvic pathology and its reflexes, but little that touches on the relation between pelvic anomalies and the secretions of the endocrine glands. In my opinion the remote effects of pelvic disease—i. e. those due to disturbed endocrine function, cause more distress to the human family, than the pathological conditions which we are able to remove surgically. But one is not in a position to operate his patient successfully, unless he has a clear understanding of the function of the internal secretions.

With this knowledge, he is able to give an intelligent prognoses and the proper care that will save him from the criticisms of a dissatisfied patient.

I believe that we are of one opinion, that the internal secretory glands are very closely connected, one to the other, in a sort of closed chain arrangement.

Disturbed function of the adrenals may produce derangement of thyroid or ovarian function, or vice versa, each had its physiological opposite.

The mental and physical characteristics of

the child are in a measure dependent on the internal secretions of the mother.

The vasomotor and other nerve centers are probably largely dependent on internal secretory function.

There are a few vital observations which I intend to discuss. 1st, Importance of properly conducted intercourse, in determining the mental and physical caliber of the future generation. 2nd, relation of intercourse to divorce. 3rd, passion as to stimulants to progress. 4th, Relation of passion to organic functions. 5th, Effect of sexual disappointment. a-Heart action; b-Hallucination; c-Hysteria; d-Anemia. 6th, Congenital malformations.

1. Much has been written of the wonderful strides made in the diagnosis and treatment of disease. But the important subject of sex relationship has received little attention—delicacy has bridled the tongue of educators, physicians and parent.

Science has remained silent, and permitted this most vital subject to be imparted to the young generation by instructors as ignorant as the pupil. The mothers of today, due to social prejudice to sex education, are acting as incubators and too often, owing to disease, or fountain syringes, do not even serve this function.

The modern woman, through selfish motives, hesitates to assume the responsibilities of motherhood which interfere with her social duties. She submits to intercourse in a half-hearted manner, her mind occupied with the latest society gossip and her hope resting in the fountain syringe.

The progeny of love is genius—to substantiate my remarks, I will call your attention to the fact that love babies are usually normal, and by their superior intelligence are usually able to eradicate the stigma attached to their birth. Why are they superior to the offspring of the social butterfly—simply because they were conceived normally.

Neurologists emphasize the importance of normal conception, and point to such nervous disorders as epilepsy and degeneracy as traceable to alcoholism or drug addiction at the time of intercourse as frequent causes of these distressing afflictions.

2. The relation of intercourse to divorce is of striking interest. It has been my observation that 8 out of 10 divorces started during the honeymoon. The natural delicacy of the mother to entering into a discussion of wifely duties with her daughter, on the one hand, leaves the young wife in a state of fearful expectancy and apprehension.

The young husband, who usually has acquired all his sexual knowledge in the brothel, treats

his innocent mate in the only manner he has any knowledge of. Accustomed to the experienced woman of the underworld he proceeds to the sexual act with little ceremony, thus creating a feeling of repulsion in the young bride.

3. Passion as a stimulus to progress. Human civilization was at a stand state until Eve discovered she was naked in the garden of Eden. Up to that time there was no advancement—man lived in the present and was satisfied with self.

I cannot recollect a masterpiece in art or literature that was the product of a chaste man or woman.

4. The relation of passion and sexual disappointments to other organic functions. 1st, The so-called nervous hearts with or without evidence of internal secretory disturbance.

In my opinion there is a strong sexual element in every case of hysteria, chlorotic girls and boys owe their condition to ungratified sexual impulse and would be relieved by normal intercourse.

Congenital abnormalities as a cause of abnormal sex relation must be eliminated before giving a prognosis or advising treatment.

My only excuse for offering this paper is to stimulate every practitioner of medicine irrespective of his specialty to familiarize himself with the subject. If every medical man would take it upon himself to do a little missionary work in this field, and enlighten the fathers and mothers of today, and the necessity of sex education, posterity would be better physically, mentally and morally.

The endocrine glands should be protected from infection in so far as it rests within our power.

Thyroid ovarian and adrenal disease are often due to tonsil infections. Personally I believe that cystic ovaries and hyperthyroidism are always due to diseases of the upper air passages.

I would counsel the surgeon before undertaking a pelvic operation to be sure that the primary condition cannot be found in the throat.

I would advise the diagnostician to study his case well before advising surgery. It may depend upon sexual defect and surgery in this case might cause unhappiness and divorce.

The physician when consulted by a patient for some nerve disorder, who fails to take the sexual history and neglects to search for tender ovaries, slight leucorrhoeal discharge, thickened pampiniform plexus, tachycardia and other signs of ungratified sexual desire is unworthy of his title. It is this class of patient that finds her way to the christian scientist, chiropractor or divorce court.



My plea is education of the public, discharge your duty as physician and surgeon, put into the schools educators of merit and integrity, and make the next generation charitable, mentally, morally, thereby raising the standard of morals and civilization.

### Discussion

*Dr. S. S. Glasscock*, Kasnas City, Kansas. These are most interesting and unusual papers we have listened to this afternoon. I have been very much pleased to hear this paper. It touches on a subject that is not much written about and we men who have a number of these nervous disease cases enjoy hearing this paper. This sexual idea is causing a good deal of discussion. Men are brutal in their natures. They do not give women any consideration at all. The lower animals are different from us because they do not impose on the female of their species. As the doctor said, a great many women do not want to have children and in order to avoid it make a great deal of trouble. On the other hand there is no question but what the divorce courts are frequently filled with people in which the man married the woman for the sex purpose alone and, therefore, because she was not able to do the impossible, goes into the divorce courts and gets release. Another kind of man wants to go out in the highways and byways.

Most of the cases of paresthesia in women are acquired from their husbands. The desire that is present in some women, that is very gratifying in the eyes of men, sometimes induces her before she is married to stray from the straight and narrow path, and for which she is ostracized, but when a young man does that he has a premium put on him. Women cannot do that. Is there any reason why a girl who has what men are seeking and goes astray, that she be ostracized. But when we lower the standard of womanhood you make useless the great aims of life, but that is what a man goes to the divorce court because his wife does not satisfy his desires, also does. Men are that way, it is part of their makeup, and yet the woman, if she steps aside, does anything, she becomes ostracized, and according to the ethical idea of men she is unfit to be a wife. But after all this sexual business is purely a matter of education. A man can be a brute or a wonderful being, according to his training. You can act as your Creator intended you to act and fulfil that great mission for which man was created and not look upon her only as an object of sexual desires. Learn to control these sexual desires and stand as you should stand.

### REPORT OF A CASE OF STRANGULATED HERNIA IN INFANCY

ROBT. I. ALLEN, M. D.  
Nowata, Okla.

Nothing original is claimed for the report of the following case, only, attention is called to the importance of careful consideration in the daily routine we are called upon to do.

Literature available to the writer failed to disclose the earliest ages at which strangulated hernia has been found, however, the important feature of this case was the symptomology, as the infant had been treated by the mother and neighborly mothers for "Colic" for a period of twenty-four hours before a physician was called.

Baby D. L. M., was born August 9th, 1921. Attended by a member of our staff, he was a normal baby in every respect, being the first born in the family he was given every attention that fond parents could bestow.

On September 7th, 1921, he became irritable crying out with an occasional paroxysm of pain, during the night a neighborly mother of a large family was summoned, household remedies including some patent medicines were brought to bear, and the baby put in what was considered a fairly good night and on up until noon September 8th.

At noon Sept. 8th, the baby became quite ill, and the attendants attempted to empty the bowels as there had been no bowel movement since the beginning of the attack, olli, rincii and soap enemas soon precipitated evidence of ileus, and at 5 P. M. a member of our staff was called to see the infant. Examination revealed projectile vomitus, temperature 97F, pulse 140 or more, cyanosis of the plantar surfaces of the foot, palms of the hands, and about the anterior fontanelle. As operation was considered imperative, no blood count was made. Long search was made before a small tumor like mass was felt in the right scrotum protruding from the external ring. Operation was advised and accepted. He was taken to the hospital and treated as an emergency, the hernia was a direct into the external ring, the loop of intestine involved was "dangerously dark" but after being released from the constriction of the external ring began to show signs of recuperation. All symptoms subsided following the operation, and the convalescence was without consequences. Again we reiterate the importance of carefully considering each and every case of infantile colic, for a possible strangulated hernia, and if some doctor is caused by it to remember one other fact in connection with these cases, then this small article will have filled its mission.

# PROCEEDINGS OF THE UNIVERSITY HOSPITAL CLINICAL SOCIETY

**Dr. R. M. Howard:** *Case of Probable Mesenteric Thrombosis.*

Dave, H., male, age 50 years, occupation barber with race track followers. Entered hospital 8 A. M. September 30, 1921, suffering from severe agonizing pain in the upper abdomen. This was spasmodic in character. The attack began about 4 A. M. after he had been awakened to go to the toilet. On admission he was doubled up with pain which he localized under the right costal arch and from which he attempted to obtain relief by pressing his hand below the arch. At this time he seemed to be verging on shock. His respiration was shallow and rapid, skin moist, pulse 68, temperature subnormal. The abdomen was boardlike on first palpation but on prolonged palpation, intervals were noted when it became relaxed. When hands were applied to abdomen patient would show signs of intense suffering, but would relax when told to do so. Patient stated that he had never had a similar attack, nor had he ever had any digestive trouble. He contracted lues a number of years ago and developed a Charcot's joint, right knee twelve years ago that was operated some time later. He says he has had poor vision several years. No history of other previous diseases could be obtained.

When examined later in the morning the following things were learned. He has had to use a catheter a number of times. There are no palpable masses in the abdomen. Pupils are irregular and fixed. Neck, lungs and heart negative. Knee jerks, absent. Loss of muscular and joint sensation. Large and non-tender right knee, with increased mobility, some grating of bone.

Impressions: Tertiary syphilis, Tabes Charcot's joint. Slight optic neuritis. Tabletic crisis?

Catheterization: Soft rubber catheter passed with difficulty. About four ounces turbid yellow urine obtained, mucoid in character. Specific gravity 1.022. Trace of albumin, no sugar. Many W. B. C's., few R. B. C's. no casts.

Blood count 10,200 W. B. C's. 88% polymorphonuclear.

He was examined by Dr. LeRoy Long during the morning, who made the following notes: "Sudden agonizing pain in abdomen 4 A. M. Pain continues. Abdomen rigid most of the time, some rigidity all of the time. Rigidity more on right side from upper quadrant downward to crest of the ilium. Examination with the stethoscope shows no evidence of peristalsis. Patient has apparently Charcot's joint, right knee. I am of the impression that this

patient has had a catastrophe involving his abdominal organs, most likely a ruptured gastric or duodenal ulcer. Symptoms modified by tabes". I examined patient at 2 A. M. of same day, finding his condition about as above outlined.

The patient received  $\frac{3}{4}$  gr. of morphine during the day and another  $\frac{1}{4}$  gr. during the night. Further observations on him during this day, the 30th of September, were as follows:

At 2 P. M. temperature 99.0 pulse 84., respiration 32, W. B. C. 7,200, polys 88%. At 3 P. M. temperature 103.0, pulse 108, respiration 32. At 8 P. M. temperature 99.0, pulse 100 respiration 22 W. B. C. 5,920 polys 80%. At 10:30 P. M. temperature —, pulse—, respiration—, W. B. C. 7,200, polys 88%.

Diagnosis considered were: Tabetic crisis in a morphine habitue, ruptured gastric or duodenal ulcer, mesenteric thrombosis, acute pancreatitis, gall bladder, appendix, renal colic. After consultation we decided to hold the patient for further observation. Treatment for peritonitis was instituted.

Further observations on the patient were as follows:

October 1st. Morning, temperature 97.4, pulse 88, respiration 20. Afternoon temperature 100.4, pulse 100, respiration — W. B. C. 14,800 polys 88. We thought here that he had a small leak from a ruptured ulcer and that had become walled off and that a further wait would offer him as much as immediate interference, possibly more.

October 2nd temperature 98.8, pulse 96, W. B. C. 9,200, polys 77, Fecal vomiting.

October 3rd temperature 100.4 to 98.4, pulse 84 to 104, W. B. C. 6,650, polys 70.

October 4th temperature 99.4, pulse 110 to 204. W. B. C. 7,650.

October 5th temperature 98.4 to 98.0, pulse 104 to 108, W. B. C. 16,250, polys 78.

Since October 3rd, three days after attack, we have agreed that operation offered him nothing, that he has an abdominal condition from which he will probably die. On October 5th he passed some old blood from the bowel. This, with the history and course of the disease, makes me believe strongly that he has had a mesenteric thrombosis, with probably gangrene of a section of the small bowel.

As to treatment it is obvious at this time that operation should have been done early. Since then it would have been futile and ill-advised. His course has been very puzzling and at no time have we felt secure in how to proceed.

I present the above opinions to you as written on the night of October 6, 1921. The

patient died early on the morning of October 7, 1921. A post mortem was done and no doubt Dr. Langston in his findings can give us the actual pathological lesion.

**Dr. Wann Langston:** *Post Mortem Report.*

The peritoneal cavity is filled with a purulent fluid, approximately 2000 cc. in amount. The stomach and intestines are covered almost completely with a purulent exudate; the loops of intestine being adhered together. The cecum is buried behind loops of small intestine and is covered with thick plastic exudate which is heavier here than elsewhere. There is no excessive dilatation of any part of the intestine and no segment shows more congestion or pathology than the rest. The appendix is not enlarged, is thin, soft, collapsed, and of an unhealthy pinkish color, but does not show any evidence of recent abscess formation nor does it contain concentrations nor fecal matter.

The entire gastro-intestinal tract was removed and opened from two inches above the cardiac end of the stomach to within one inch of the anus, and no inflammatory areas, ulcerations nor evidences of perforation were found. One or two small areas in the ileum and a number in the colon were apparently congested but there was no evidence of any erosions.

There was no demonstrable pathology in the mesenteric vessels but on account of extensive plastic exudate satisfactory examination could not be made.

Anatomical Diagnosis: Cause of death: wide spread purulent peritonitis, involving the entire abdominal cavity. Acute nephritis. Myocardial degeneration. Acute splenic tumor. Chronic cystitis. Charcot joint, right knee.

N. B. Although a very careful search was made, no primary focus of the peritonitis was demonstrated.

### Discussion

**Dr. H. Reed:** The findings were so atypical early in this case that inaction was justified. No conclusion as to the source of the trouble can be made from the reports. If the pathologist failed, because of the plastic exudate to find vessels that were necrosed, then the case may possibly have been one of thrombosis of some mesenteric vessels with functional failure of the intestine and the other conditions following

**Dr. Kuhn:** Could rupture of a small liver abscess be excluded?

**Dr. Langston:** The liver was normal.

**Dr. Fishman:** We have here a case of peritonitis, the primary focus of which is not determined. The reading of the autopsy report with reference to the appendix and its surroundings make me consider the explanation of this

case to be the most common possibility, namely, a ruptured appendix.

**Dr. LeRoy Long:** At the onset this patient very nearly had the clinical findings laid down by Moynihan as indicating a ruptured ulcer, namely, sudden agonizing pain which does not abate, boardlike abdomen, shallow respiration, and anxious countenance. This patient, however, had occasional relaxation of the abdomen. At the end of 12 hours, however, the findings were confusing and operation was delayed.

I note that the autopsy report speaks of the adhesions in the right lower quadrant as heavier, rather than older than elsewhere. I think the heavier adhesions and exudate there can be explained as follows: The attachment of the mesentery is obliquely downward to the right. With the patient kept in Fowler's position the pus from the entire upper abdomen in gravitating downward is directed toward the right into the region of the cecum.

I have in mind a previous case in the hospital which had cramps and similar symptoms for a week and then died. Post mortem showed mesenteric thrombosis with 6 or 8 feet of gangrenous bowel.

The lesson, I think, from these is that in a case with sudden pain which does not abate, rigid abdomen, shallow respiration, and anxious countenance, one should open the abdomen, quick.

**Dr. R. M. Howard,** closing: My paper as presented to you was written before the death of the patient. I still think a mesenteric thrombosis or embolism must be considered. The following points would be considered. (1) The history of the sudden onset, and its character, in a man known to have tertiary syphilis. (2) The mild constitutional reaction, as indicated by continuous low temperature, pulse rate, and low white count. (3) Blood in the stool. (4) A gradual developing intestinal obstruction and (5) A terminal peritonitis.

Embolism and thrombosis of the mesenteric vessels are not every day occurrences, but because of the difficulties encountered in the diagnosis they probably occur more often than we appreciate. Not all result in fatalities by any means.

Kleine of New York in a recent article reviews the experimental work which has been done on dogs and rabbits where the mesenteric vessels are blocked, either by ligation of the vessels, serving a portion of the mesentery from the small intestine or injecting some foreign material in the blood stream, and concludes that although the main trunk or some of the branches may be blocked, many of these animals survive because of the establishment of collateral circulation;



others die because the blood reaching the intestines is not sufficient to continue function of the intestine, or to sustain life of the part affected. In other words he has been able to show definitely that one of three conditions will develop when the mesenteric vessels are blocked.

(1) Establishment of collateral circulation sufficient to preserve function and life of the part supplied.

(2) Establishment of collateral circulation sufficient to preserve life, but not function of the part supplied, the animal developing obstruction followed by peritonitis and death:

(3) The development of hemorrhagic infarcts in the part supplied, insufficient collateral circulation to preserve life, and gangrene of the intestine rapidly followed by death.

Operation and post mortem findings in man have clearly shown that analogous conditions arise when the mesenteric vessels are blocked by embolism, or thrombosis. Emboli arise more often from vegetations in the left heart or from atheromatous patches in the aorta; thrombosis from local or systemic sclerosis of the vessel wall or from thrombo-phlebitis extending from inflamed neighboring viscera.

In closing would say that this patient may have had (1) an Embolus or thrombus or (2) a small rupture of the bowel not found at autopsy. He should have been opened and drained on the second day though I do not think we would have found the lesion nor have influenced the termination of the case.

#### PROCEEDINGS OF OKLAHOMA CITY CLINIC, ROUND TABLE, WESLEY HOSPITAL

**Dr. M. E. Stout:** *Essential Uterine Hemorrhage at the Menopause—Radium Treatment.*

■ **Mrs. C—.** Case No. 7440. Age 40. Has always been a strong healthy woman. No serious illness except for present trouble.

Menses began at 11. Somewhat profuse from the beginning, but regular.

Married at 20. One miscarriage with first pregnancy. Para two. Both living and healthy. Labors normal. Periods have been very free for several years, and the duration has gradually increased until there has been a continuous flow of blood for the past two years. She often passes large clots and has become so weak that she is unable to do her household duties and is forced to spend a large share of her time in bed, on account of the flow being increased when she is on her feet.

The physical examination is negative, except for the secondary anemia which is evidenced by the color of her skin and mucus membranes. The blood picture is normal, except for a re-

duction in the cell count. The urine is normal. The uterus is normal in size and position. No irregularities and no pelvic mass or tenderness.

She was curretted on June 29th, and 50 mgs of radium was inserted into the uterus for 30 hours. There was no evidence of malignancy found in the currettings and the patient made an uneventful recovery and has no vaginal discharge of any character since. She has gained 20 pounds in weight. Her lips are red and to use her expression, she is in "perfect health".

It is our opinion that this is the simplest and most effective means of treating these unexplained uterine hemorrhages.

**Dr. A. L. Blesh:** *Emergency Surgery.*

Case —. Married woman, comparatively young, was brought into the hospital a few days ago by a very excellent local physician, with diagnosis of acute appendicitis. In my opinion it is rare indeed that an emergency is grave enough that a brief pregnant history cannot be elicited, or a careful though hurried examination cannot be made. There is no need of urging the importance of this in arriving at a correct diagnosis.

In eliciting this history I was struck forcibly by a few salient facts. First, that there had been a menstrual disturbance, slight though an actual fact. The last period, three weeks before, had appeared on time, run its usual course, and ceased for a day. It then returned and the patient had been "dribbling" ever since with now and then quite lively spurts. Second, that one week ago she had had a sudden severe lancinating right lower abdominal pain of only about 30 minutes duration, when it disappeared entirely until less than eight hours ago. It now suddenly re-commenced so severe as to double the patient up and put her to bed. At end of six hours physician was called and noting that right lower abdomen was hard, that she had been nauseated, that she had temperature of 99 1-2 degrees, that the pain began in right side, he made a diagnosis of acute appendicitis with impending rupture and rushed her to the hospital. Third, that upon arising from bed she fainted. Fainting is not usual in appendicitis however severe nor indeed even in rupture with spreading peritonitis.

Physical examination was negative except for temperature of 99 1-2 and pulse of 100. The pulse was not full and strong, as in peritonitis, but soft and compressible. Abdomen was extremely sensitive all over, but especially so over right lower quadrant. Rigidity general but marked right. Patient appeared anemic.

Pelvic examination seemed to give a slight cul-de-sac resistance and the cul-de-sac was not yielding. Movement of uterus gave a severe pain in rectum. She had also been complain-

ing of sharp rectal pain since onset. In night, laboratory closed, no laboratory reports, but did not deem the laboratory necessary to a: **Diagnosis** of Pregnancy, right tubal with rupture or abortion and active bleeding.

Operation, immediate, Findings large quantity of free blood in peritoneal cavity—6 weeks fetus and secundines just escaping from fimbriated end of tube from where cavity bleeding was occurring.

After a hurried toilet abdomen closed without drain. Patient doing very well.

**Remarks:** This diagnosis was purely clinical, occurring in the night and being a real surgical emergency. To have delayed operation for laboratory reports, which all will admit are often most helpful, would have been almost equivalent to man-slaughter.

How much would the laboratory have actually aided us? Doubtless the blood count would have shown at this stage a mild leucocytosis with a shortage of reds and possibly a low hemoglobin. But the observing clinician could almost tell all that by a careful inspection of the mucus membranes. Uterine scrapings would most likely have shown Deciduoma, without placentation. That would have been valuable information.

The laboratory must take its place in diagnosis today as secondary to clinical observation. At present we do not need more development of laboratories but more careful clinical elaboration. Today the crying need is of clinicians approaching in their deductive powers the giants of yesterday. The laboratory is able, in most instances, to *give us additional symptoms*.

I would like to say more on the subject of ectopic pregnancies, but time and space forbid.

**Dr. D. D. Paulus:** *Case of Gangrenous Appendix and Cholelithiasis in Same Patient.*

Case No. 7615. Age 50. Housewife. Family history negative. Had measles, whooping cough, mumps as child. Good recoveries. Para twelve. Seven living. Never has had any serious illness except for slight dyspepsia at times with feeling of fullness after meals. Also has spell with gaseous accumulation with belching of gas.

Present illness started with generalized abdominal pain two days ago. Few hours after pain began, became nauseated and vomited several times during the next twelve to fifteen hours. Temperature 101 about four hours after pain began. Pain and marked tenderness localized over right lower quadrant of abdomen six hours after pain began. Has been running temperature ever since illness began. No jaundice, no urinary disturbance. Vomitus did not contain greenish material.

Physical examination—Eyes, pupils equal and regular, react promptly to light. Conjunctiva shows slight yellowish tinge. Throat negative. Teeth artificial. Glandular system negative. Chest and heart negative. Abdomen—liver and spleen not palpable. Marked rigidity and tenderness over entire right side—most marked in right upper quadrant over G. B. region. Tenderness extends well around side but not to the back.

Laboratory findings—W. B. count 15,800. Urine 10.24, acid reaction, large amount of albumen. Sugar and indican negative. Microscopic shows few granular casts.

A diagnosis of Acute Appendicitis with probable also Sub-acute Cholecystitis was made, because of the rather typical appendiceal history. The marked tenderness over the G. B., however, was rather confusing. A retrocaecal appendix could account for tenderness extending well around the side toward the back. With this in view, the recommendation was made for a incision to cover both appendix and the gall bladder.

Operation showed—appendix completely hidden behind mesenteric folds behind the caecum and was found to be gangrenous throughout its entire length. The gall bladder was quite congested and packed full of stones. No further exploration was made.

**Dr. J. Z. Mraz:** *A Case of Tuberculous Pyelonephritis.*

Case No. 7650. Ma'e, aged 28. Family and personal history negative.

Present Illness. For past several years patient has been gradually losing in weight and strength. This has been associated with bladder symptoms which at first consisted of frequency with the addition of late or marked dysuria. Following a cystoscopy done in Kansas City a month ago he had pain in right lumbar region and hematuria.

Physical examination, shows a man with considerable emaciation and of cachetic appearance. Otherwise negative except as follows. The chest examined by Dr. W. W. Rucks shows impaired resonance right apex, no rales. X-ray shows a bilateral involvement probably inactive. Abdomen, very slight tenderness in right renal region. Marked tenderness to pressure over bladder.

Cystoscopy done under N. O. and oxygen discloses a number of small ulcers and minute tubercles surrounding right ureteral orifice.

Unable to catheterize right ureter. Left ureter catheterized. Left kidney secreting a normal urine and doing double work as shown by the excretion of 35% of phenolsulphonephthalein in 15 minutes injected intravenously.



X-rays negative.

**Diagnosis:** Right Renal Tuberculosis. Diagnosis based upon the following points. Lung findings, progressive loss of weight, the bladder symptoms, ulcers and tubercles surrounding right ureteral orifice and the markedly increased functional activity of the left kidney.

Nephrectomy performed by Dr. A. L. Blesh. Kidney about one-third larger than normal and studded with tubercles. Wound closed in usual way with two drainage tubes. One to pedicle, the other being slipped down over the ureter according to the method of Dr. Judd.

Dr. W. H. Bailey reports smears made from tubercles in kidney positive for tubercle bacilli.

**Dr. J. C. MacDonald:** *Foreign Body in Lens of Eye.*

Patient comes in because of painful eye and gives following history. Four weeks ago, while hammering a steel file with hammer, something struck eye and caused slight pain. The following day his family physician was consulted and as no foreign body was found it was thought something had struck eye without embedding itself. There was very slight pain for a few days and this had entirely disappeared until the day before the patient came in for examination.

**Examination:** Left eye shows bulbar conjunctiva to be slightly congested, there is a small scar in cornea directly over a very small punched out opening in iris. Vision 15-20. Ophthalmoscopic examination shows cloudiness of lens so marked that the disc or retinal vessels cannot be seen. Directly posterior to the opening in iris there appears to be a foreign body in lens. X-ray showed small foreign body in anterior part of eye. Several attempts were made to get the foreign body with large magnet, but these failed.

Four days later the vision had decreased to 15-100 and the conjunctiva had become greatly congested and the pain had become more severe.

Because the condition was so rapidly growing worse, it was thought the only chance to save the eye from enucleation would be to remove the lens, hoping to thusly remove the foreign body.

The lens was removed and with it the foreign body. The inflammation of the eye rapidly subsided, and now, one month later the eye appears well. Although the eye will not be useful for vision it will be much preferable to an artificial one. The right eye never showed any evidence of a sympathetic involvement.

## PROCEEDINGS OF ST. ANTHONY'S HOSPITAL CLINICAL SOCIETY

### FUNGUS INFECTIONS OF THE SKIN:

**Dr. Curtis R. Day:** *Fungus Infections of the Skin.*

No branch of Medicine has suffered a greater disturbance in terminology and classification of its particular diseases than has that of Dermatology. This has been especially noticeable within the last few years, and has been partially and mostly due to recent research in bacteriology and pathology. It seems to me that a recent and very practical classification of skin diseases, especially from the etiological standpoint, has been offered in the following: 1. Anaphylaxis and disturbed metabolism. 2. Fungus infections. 3. Bacterial infections. 4. Irritation, chemical and physical. 5. Neoplasms.

In addition to those classified as fungus diseases, many cases were diagnosed as eczema, pruritis, seborrhea, bromidrosis, chromidrosis, hyperidrosis, pomphylx, pityriasis, pemphigus, lichen, herpes and erythema. Ten years ago few varieties of fungus organisms were known. Farley, of the University of Pennsylvania, has isolated fifty-one varieties of fungi. Werdman isolated nine varieties of fungi from a single case of ring-worm of the nails. Moore, of St. Louis, cultured from a case resembling tenia cruris an organism very similar to the one producing thrush. Tenia cruris has now been reported on flat surfaces. White, Farley, and others have demonstrated fungi from cases of lichen planus. Other authors report cases of fungus infection closely resembling pityriasis or seborrhea. Small, of Edinburgh, reports psoriasis secondary to other diseases, especially seborrhea. Ota, of Japan, reports many interesting findings in reference to culture developments, an important one being that acid media is required for growth of most fungus organisms. Brocq, of Paris, reports double infections in most cases of tuberculosis of the skin.

I have here tonight three cases of proven fungus infection of the skin: First case: (I wish to thank Dr. R. M. Balyeat for the privilege of showing this case.) A young American Indian with a fungus infection ingrafted upon a tubercular infection of the neck. (Demonstration of the case.)

Second case: A middle-aged white man with a pustular type of infection upon the anterior surface of the right leg. This lesion resembles the lesion of the old classification of ecthyma. A small scaly patch, not unlike a syphilide is seen upon the left hand; a fairly well outlined, faintly brownish-yellow stained patch is found upon either side of the anterior surface of the chest, high up. These latter lesions were at first difficult of recognition.



The laboratory reports a diagnosis of microsporum furfur or tenia varicolor. (demonstration of the case.)

Third case: Is that of a child twenty months old with lesions upon the anterior surfaces of the legs resembling those of impetigo. Laboratory reports have shown the presence of a fungus infection of indefinite classification. (Demonstration of the case.)

### Discussion

*Dr. E. S. Lain:* I had hoped to have some one discuss this subject first—for instance the internist. He sees these cases first. Dr. Day has so elaborately related the changes in dermatology which have developed with the aid of the laboratory man and the clinician. This should not discourage us but rather encourage us to study these diseases more carefully. The subject of tryphyton and microsporon infection has brought much discussion and material for research.

Some of the characteristics of the lesions might be mentioned for the use of the man in general medicine. First, they are not always ring-shaped and have no relationship to worms. They may be serpiginous-like lines, or necrotic, or in coalescing patches. Secondary infections are common. Then there is a mixed type simulating impetigo. Recently it was mentioned by Hodges, of the University of Georgia, that infection of fungus under the nails is astonishingly common, leading us to think of fungus as a cause of clubbed nails. Another thing of value is that some people seem to be more or less immune to fungus infections. Some types are deep and some are superficial. It was clearly demonstrated in the second case here that sweating of the hands is easily noticeable—more prone to hyperidrosis. This condition is at least suggestive.

*Dr. R. M. Balyeat:* The history of the first case is that he came in several weeks ago with a diagnosis of syphilis. The cervical glandular condition has existed for eight years. The pus showed streptothrix or cladotrix and pseudobacillus. He was given potassium iodide and getting fair results for a period, but did not heal. Then the sinuses were opened under local anaesthesia, following which healing did not occur. A large amount of pus was demonstrated two days later. He was then operated under general anaesthesia. Microscopic examination of the removed glands showed tubercular lesions. Now it is apparently going to heal.

*Dr. E. S. Lain:* A few years ago I had come into my hands a similar case which had been diagnosed as cancer by Dr. Isadore Dyer, of New Orleans. At that time we demonstrated blastomycetes. In consulting with Dr. Dyer

he informed me that he had found sporothrix and that it was fairly common to find the sporothrix in skin cancers. The case later was proven to be that of cancer.

*Dr. Horace Reed:* In operating this second case my impression was that the glands had been practically destroyed. I happened to find the small one fairly well preserved, from which the diagnosis of tuberculosis was made. I believe it to have been primary.

*Dr. Curtis R. Day,* closing: I have nothing further to say, other than I believe alkaline drugs should be used in this treatment, since most of these organisms thrive in acid media.

A very interesting and elaborate report of two cases of typhoid and one case of chronic myocarditis was given by Dr. John A. Roddy. Also a paper giving the results of an exhaustive comparative study of all the cases of cancer of the stomach occurring in the records of St. Anthony's Hospital was presented by Dr. J. W. Riley. The length of these papers prevents their appearance under this writing, and are to be found in the next issue of St. Anthony's Hospital Bulletin.

### COUNCIL REMEDIES

One of the most important developments in the medical history of the past five years has been the work of the Council on Pharmacy and Chemistry, of the American Medical Association. Their examination and analysis of newer remedies has done much to advance the standard of manufacturing pharmacy; it is safeguarding the doctor against inferior products, and indicating those for which misleading claims are made.

The cooperation of the doctor in using and prescribing Council-Passed products is making this work more effective each year. The cooperation of the manufacturers is, also, an encouraging recognition of the values of this service. A partial list of the Council-Passed remedies, Manufactured by the Abbott Laboratories, Chicago, appears in this issue. These are obtainable on prescription at the leading pharmacies, or may be obtained direct, as desired.

### PEPSODENT

The effect of fruit juices in the mouth is now quite clearly understood. The common expression that a taste of orange or apple makes one's mouth water means that these mildly acid fruit juices have the peculiar power to stimulate salivary flow.

More than that, it means that the saliva which responds to this stimulation is frequently more normal than was found in the same mouth during the pre-stimulated period. This is one of the chief reasons why fruit should form a part of each meal, why each meal should open and likewise close with fruit.

It produces a copious, fluid, alkaline saliva which is so essential in order that the oral cavity may function properly.

Latterly various investigators have found that dentifrices should be mildly acidic like fruit to assist nature in maintaining a normal saliva. They have, moreover, proven that alkaline mouth preparations are contra-indicated in the mouth and should be abandoned because they oppose nature in maintaining normal oral secretions.

The most universally used acid dentifrice is **PEPSODENT**. It is endorsed by many in the professions and used daily by millions because it stimulates salivary flow in manner similar to fruit.

# THE JOURNAL

OF THE

## Oklahoma State Medical Association

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Reprints of original articles will be supplied at actual cost, provided request for them is attached to manuscript or made in sufficient time before publication.

Articles sent this Journal for publication and all those read at the annual meetings of the State Association are the sole property of this Journal. The Journal relies on each individual contributor's strict adherence to this well-known rule of medical journalism. In the event an article sent this Journal for publication is published before appearance in the Journal, the manuscript will be returned to the writer.

Failure to receive the Journal should call for immediate notification of the editor, 508 Barnes Building, Muskogee, Okla.

Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

Advertising rates will be supplied on application. It is suggested that wherever possible members of the State Association should patronize our advertisers in preference to others as a matter of fair reciprocity.

### EDITORIAL

#### PROFESSIONAL SECRECY—PRIVILEGED COMMUNICATIONS

Not rarely the Journal is asked for opinions as to the propriety of a physician giving information relative to some case coming under his charge. Study of the rule of privileged communications at first may seem puzzling to the medical mind, but stripped of all the usual surrounding jargon a physician may safely rely upon the fixed rule that whatever knowledge he may acquire by reason of the patient having trusted him by disclosing to him any information, which the patient would not have disclosed except on the theory that such information would be held inviolate, or information the patient gave with the idea that it was necessary or would prove helpful in the care of his case, or information acquired by the physician on observation of the patient; is privileged, confidential and should not be violated by disclosure to others. The exceptions

to this are few if any. Courts, as a rule, sacredly protect the physician even under oath upon his refusal to answer questions which would violate the confidence placed in him by a trusting patient. Quite commonly physicians are asked for information as to the nature of some illness for which they have treated a patient. The only proper rule to follow, and it should be so universally followed that it becomes a habit, is to divulge nothing whatever in the manner of information obtained simply by reason of having been, for the time, placed in a confidential relation to his patient. Many cases arise which may be termed borderline, but application of the rule of this strict silence will usually be found to be the correct and ethical rule. This applies to information acquired even incidentally to the matter he may have been called to care for. For instance, a physician in treating one illness or injury may have disclosed to him, without a word from the patient, the patent fact that the patient is also suffering from some loathsome, infectious or other disease, which, if made public would or could result in injury or humiliation to his patient. In the process of treatment one may discover that chronic nephritis exists. While disclosure of that fact may not be either humiliating or injurious to his patient at the time, it may become of vital concern to him in after years. The knowledge of the situation would not have passed to the ordinary lay visitor, and it is at once seen that it was only acquired by the physician by reason of his peculiar training in a specialty. The only decent course one may adopt in such case is that of strict silence. Violation of this course is so wrong that all states reserve the right to revoke a physician's license to practice if it is found that he has wilfully betrayed his patient's trust (See rule 3, Sec. 6905, Revised Laws of Oklahoma, 1910). Malice is presumed by the mere publication of a privileged communication, unless it may be clearly shown to be not malicious by sufficient evidence. (Sec. 4958, Revised Laws of Oklahoma).

#### OHIO—A COMPARISON

Strange doings in Ohio. Oklahomans, who perhaps have been spoiled in punctilious observance and respect of their rights, will be puzzled on having a glimpse of the way things are done in Ohio. Full of bright medical minds there is constant unrest, in the end, of course, productive of advances and betterment. The latest sensation comes from the Annual Address of the Association's President, Dr. J. F. Baldwin, Columbus. Ranking as one of the state's greatest, as an accomplisher of things worth while, his address teemed with originality, parts of it handling without gloves certain



phases or problems the concern of the Ohio doctor! Suggesting that the "powers" should either build a University Medical Department worth while, in keeping with the standard set by the University of Ohio or Western Reserve; or abandon all attempts of half-hearted accomplishment. He brought down the wrath of an Association of Anesthetists by declaring that the whole truth was not being told about the fatalities of Nitrous Oxide Anesthesia, that "Teter, of Cleveland, in a personal communication, informed me some years ago that he knew of twenty-six fatalities, none of which had been reported; and I have learned of a number of fatalities in Cleveland since the time he made that communication-but I have seen no reports of those details. Gwathmey, of New York, in a personal communication, told me that he knew of from twenty to forty deaths, none of which had been reported; Morgan of Chicago, the same tenor". But the remarkable part of his President's Address contains this statement: "You probably all look upon *The Journal of the American Medical Association* as an open forum for the discussion of all matters of professional interest, but you will look in vain through its columns for adverse reports on the subject of Nitrous-Oxid-Oxygen, or for papers condemning in any way its use. I know personally of four such papers that have been sent to that Journal, two of them by anesthetic specialists, and one by a professor of obstetrics in a western medical college, but all four of them were promptly refused, while papers advocating its use have frequently appeared." Dr. Baldwin had much more to say on that matter, but the above is sufficient to indicate the characteristics of his address. The problem of "Cults" he also handled in a masterly manner, not overlooking the very prominent part our own incompetent manner of handling common-sense medical matters played in increasing the ranks of these unfortunates. His remedy lies in the suggestion that our schools should give the student more of medical history, more of consideration of actual treatment applied to the case at hand, more of the use and effects of our well known drugs, so then we would have less of the detail man from pharmaceutical houses, "educating" the doctor on what he should give his patients. Throughout, the address was a masterly arraignment of many present day medical irritations and farces.

The upshot of the whole matter was, and that is what will amaze an Oklahoman; that *Dr. Baldwin's address was never published* by his own association or its Journal. No one can read the matter presented without at once grasping its inherent truths. Why it was refused publication is beyond the ken of a side line observer, for if a presentment ever contained the actual meat of the cocoon, the

address contained that very element. The doctor had to publish his own address, but with it there appears the commendation of Bowman, Chancellor, Pittsburgh University; Francis Carter Wood; Hugh Cabot; V. C. Vaughn; A. J. Ochsner; Robt. T. Morris; Puckner of the A. M. A.; Binnie; Bainbridge; Mayo; Baldy, Montgomery and others, truly a sufficient array of backers to salve any physician's feelings. The Oklahoma Journal feels impelled to say of the man, "May your shadow long survive."

### SECRETE YOUR TRUTHS

We have long suspicioned that officers of the U. S. Public Health Service were chary of suggesting innovations, changes tending to betterment of their work, because they were not welcomed or appreciated by the smug, self-satisfied "higher-ups", but never before have we experienced knowing that mildly stating the mere truth and suggesting improvement of a condition well known to exist would be followed by dismissal of the hardy soul who so forgot himself as to utter the truth. However, that is exactly what happened to Dr. Haven Emerson of that Service.

Addressing the American Hospital Association at West Baden, Dr. Emerson took occasion to note that the Service was indeed handicapped by the well-known tendency of a certain percentage of the beneficiaries, who being more than satisfied to remain sick charges of the Government, neither aided in or cared to alter their state of helplessness. That this exactly states the truth is too well known to those having contact with these men, to doubt for a moment. Examiners and officers of the Service have noted many plain cases of apparent malingering, exaggeration of the claims of disability, and the palpable desire of the claimant to impress upon the physician attending him, that his was a case of terrible import. The Public Health Service should take a page of history and experience from the records of those heretofore handling claims of pensioners of the Government, for men are much alike the world over, and there it will be seen that magnifying one's illness is a common practice among some of our late "heroes", but, when we have to stand by and see an honest man penalized for calling attention to this matter, then indignation knows no bounds, and the desire to rectify such wrong will remain uppermost.

If ever a branch of the Government needed renovation, it is certainly this self same, satisfied aggregation sailing under the colors of supposed saviours of our soldier sick. That this minority among them will eventually cast suspicion upon the real sick is too evident, and the one ferreting out that class deserves some-



thing more than mishandling as was the treatment accorded this professional man who saw the thing just as it existed and felt called to protest against it. Dr. Emerson also objects to laymen being placed in position where they may order professional men what to do. Certainly that is a grave objection. It is bad enough, productive of enough harm, to have incompetent medical men set up as directors of the competent, as they are in this work, but when a layman is given that duty, it then becomes intolerable. A Congressional investigation would or should do much to rectify this wrong.

### THE COMPARISON ODIOUS AND IRRITATING

Wassermann tests are at an end at the State Board of Health Laboratory. The pitifully inadequate sum of \$150 monthly salary an ignorant Legislature provided as sufficient remuneration to attract two competent bacteriologists has failed. No self respecting physician of ability can afford to give his time for an amount which would be scorned by a cab-driver, or any worker in any trade of the scores of occupations. Neither may the State Commissioner of Health do that which any executive of good sense would do, facing a loss in an important department with other departments holding unused funds—transfer to the exhausted—no, not for a moment. That would be permitting one of our State directors or managers to use his faculties and abilities in a sensible business-like manner. That system is unknown to our present political scheme of the eternal fitness of things, which demands in every case that two steps be taken if one would suffice.

This state of affairs excites more protest when all other niggardly sums believed by an ignorant Legislature to be sufficient, doled out to the few who serve where many are known to be necessary if proper service is rendered the public, are totaled, then compared with salaries provided for the ever-increasing courts, their relatively high salaried officers, not forgetting the army of political hangers-on, inevitable accompaniments. Enormous sums are voted to maintain legal machinery over the State while more important factors of public health are shelved with salaries which every thinker has long realized purchases for the people values exactly commensurate with such sums. Their inexcusable neglect has given the people of Oklahoma nearly no real comprehensive protective public health returns—the physician holding appointment, rightly too, giving in return service fitting the pay. This we know to be the fact with occasional and few exceptions, where enthusiastic health

officers have served with exceptional zeal and brilliancy. However, we cannot escape the law of value for value—as long as we provide nothing, we will have nothing and as long as the doctor, the only informed person “in” on the matter, gives it no creative thought and withholds his aid that part of our civic and political function we must fill as the lawyer fills the legal sphere his technical fitness demands—we will be shamed by just such humiliations as this.

Our profession should no longer serve the State officially and gratuitously, or nearly so, when all other professions or skilled trades demand as their due—and get it—a salary with value for value as a basis. Unless the positive evil lack of salaries is creating is soon checked, we shall witness the only possible result—every public health activity will be lodged in the hands and under control of mediocrity of the lowest degree. At this time there is hardly a position in any branch of the Federal or State government an active, fitted, capable doctor can afford to accept. This is now producing the regrettable result such short-sightedness might have foreseen. With a few fine

exceptions, the service is rapidly becoming honeycombed with impractical, obvious failures up to now.

### NEW RULE ON MEDICAL DEFENSE

After much consideration, investigation of similar rules in force in other state organizations having Medical Defense as one of the features of membership, the Medical Defense Committee has adopted the following rule:

#### Joint or Co-Defense With Indemnity Companies

“Where the Medical Defense Committee is convinced that the interests of any member sued for mal-practice are adequately and sufficiently protected by reason of the member holding and being possessed of an indemnity policy, defense of such member will not be made unless under exceptional circumstances, which demand such co-defense to properly protect his interests. Where defense under such conditions is clearly a duplication of energy and waste of money unnecessarily, it will be expected that the member rely upon his indemnity company for defense. All such cases, however, will be given full investigation before decision is made”.

This rule has been made necessary from the experience of our officers that a great deal of unnecessary waste and loss has occurred in according defense to those members who were more than adequately protected by holding indemnity policies. Already in several instances members applying for mal-practice defense have readily listened to the suggestion that such defense

would only entail useless waste and loss, that while the Medical Defense Committee realized the member was entitled to the Defense if he insisted upon it from a technical standpoint, yet from the common sense and practical standpoint extending him defense would only end in a useless waste. In every such instance the member has seen the good sense and reasonableness of the suggestion and has been willing to help the Medical Defense Fund by complying with the suggestion. Instances have also occurred, where our attorneys, following mutual agreement with attorneys representing indemnity companies, have appeared at the trial of the case, largely in a silent or advisory capacity, have had the unwarranted interpretation that they rendered no service deducted by the member we were defending in exactly such instances as the above rule hopes to meet and avoid. Application for defense, in the first place, should not have been made, participation by attorneys, other than those already provided in liberality could by no possibility strengthen the defendant member's cause, possibly the reverse might be the result; the jury sympathetically rallying to what they consider the "under dog", who they would see as struggling in an unequal fight against great odds. The psychological possibilities inherent in these jury cases are without limit and are more feared by skilled attorneys than they will admit.

### PROFITEERING AT THE EXPENSE OF THE HELPLESS

(The editor, believing that some action in the interest of a proper observance of humanitarian principles should be taken, reproduces the correspondence herewith attached. We should see to it that these heartless practices are prohibited.)

November 1, 1921.

Dr. A. R. Lewis, State Commissioner of Health, Capitol Bldg., Oklahoma City.

Dear Doctor:—For a long time I have been wondering if there was not some remedy for a mean situation existing in Oklahoma, which is taken advantage of by certain classes of contemptible drug profiteers.

I refer, first, to the situation surrounding the dispensing of alcohol. I have just called Mr. George McLaurine, who advises me that he pays about \$8.50 a gallon for grain alcohol. I infer that all other druggists are charged that amount. The point is that practically every one of them grudgingly dole it out as if they were dealing in illicit goods, charging the highest "boot-legger" rates obtainable to those unfortunate enough to be forced to pay the price.

Is there not some way, by which they can

be required to adhere to some reasonable degree of profit and not rob the public?

It seems to me that possibly you might be in a position to investigate this and then suggest some remedy to the Governor or whoever has control of the matter.

The other matter is the one surrounding the prescribing of narcotics necessary for the relief of those cases chronic and incurable. I have in mind one such—a poor little wreck, dying by inches, husband a working man, yet, recently he was advised that my prescription, calling for twelve one-fourth grain tablets of morphine, would cost him \$1.25, "as the price of the drug had gone up." This charge is clearly made by the druggist on the theory that he is dealing in a dangerous product, that he must exact an ungodly, outrageous profit from those, who have no recourse except to pay it. Just think of the profit on twelve such tablets at \$1.25. Yet, when I cut from a retail price-list a quotation on such tablets, gave it to the victim with instructions to show it to the druggist, he simply dismissed the matter with the statement that, "Thompson didn't know what he was talking about."

I hope you can find some means to look into this and correct it, for it is a damnable outrage that these unfortunate people are placed by the state in a position where their helplessness permits them to be robbed.

With best wishes, I am Your friend,

C.A.T:K C. A. Thompson.

November 2, 1921.

Dr. C. A. Thompson, Muskogee, Okla.

My dear Claude:—In reply to yours of the 1st, beg to state that you have exactly expressed my sentiments in regard to the condition that I realize exists all over the State of Oklahoma, particularly in regard to these cold blooded, profiteering druggists, who are taking advantage of this narcotic law to hold up these poor chronics and victims of incurable diseases, in filling their prescriptions from a legitimate practicing physician.

I have heard of other just such cases as the one you cite, in fact I had a case in my own practice of an old lady with a Carcinoma, that nothing would give relief but small doses of morphine. Through the combined efforts of her husband and grown son, they were able to make enough money to pay these blood thirsty druggists their profiteering prices for the opiate necessary for her relief above a mere existence, but fortunately the poor old soul was relieved of her suffering by death a short time ago.

I think the druggist that would take advantage of these situations has no more heart in him than a narcotic bootlegger who will peddle his wares to innocent children. I am



going to refer your letter to the Governor and I think this matter should be brought up at the next meeting of the Pharmaceutical Association.

It is certainly a serious proposition from a humane standpoint and deserves to be looked after but the best method to pursue I am at a loss, at this time, to figure out. Hoping that we may, through some means, accomplish something for the relief of these poor unfortunates and with very best wishes and kindest regards, I am Your friend, A. R. Lewis, State Commissioner of Health.

#### THE SOUTHERN MEDICAL ASSOCIATION, HOT SPRINGS, Nov. 14-17

At the request of the officers of the Southern Medical Association, the writer has issued to the Oklahoma medical profession a letter of invitation to every possible and prospective attendant to be present. It is very gratifying to observe the names of many prominent Oklahoma physicians and surgeons upon the various section programs of the meetings. It is gratifying to see a larger array of our own State's profession so placed than ever has been observed before, and the variety of the fields covered reaches into every specialty. Hot Springs, as is well known, is one of the pleasure spots of the United States, being possessed with a remarkably large number of modern hotels, so that there need be no doubt as to the ability of the City to care for a large number of visitors, but hotel reservations should be made at once in order to be insured of no delay on arrival for the meeting.

Both the Southern and the Arkansas State Association are urgently inviting you to attend this meeting, the Arkansas profession, especially taking pride in the affair and have left nothing undone to make it a profitable and pleasant meeting. A wide range of clinical material has been secured, making that feature an assured success.

A hurried inspection of the program shows the following names of Oklahoma physicians: Drs. A. L. Blesh, vice-chairman, surgical section; M. E. Stout, R. D. Long; LeRoy Long; D. D. Paulus; L. J. Moorman; Wm. A. Bailey; E. S. Lain; M. M. Roland; E. L. Yeakel; S. W. Wilson; C. V. Rice; J. A. Hatchett; W. A. Fowler; F. L. Carson; J. E. Hughes. No doubt other names were overlooked in the hurried reading, but this is a very respectable, as well as highly efficient representation.

#### IMPORTANCE OF NUTRITIONAL ASPECTS ON FOETAL LIFE

The transcendent importance of well balanced nutritional support, coupled with proper hy-

gienic attention of the expectant mother is so strikingly illustrated in the tables accompanying an article on "Weight of Newborn Filipino Babies", Marino Tolentino, M. D., Philippine General Hospital Manila, (Jn'l. Philip. Islands Med. Ass'n. May-June, 1921), that it is here reproduced with the suggestion that its lessons may be applied with alterations to the care of the American expectant mother.

Tolentino says: "1. The average weight of the Filipino child at birth may be stated as 2,924.2 grams (6 pounds, 12 ounces). 2. The average weight of newborn babies in the charity ward is 2,962.4 grams (6 pounds, 15 ounces). 3. The average weight of newborn babies in the pay department is 3,510.6 grams (8 pounds, 5 ounces). 4. The babies of women who had stayed in the hospital for not less than ten days before childbirth were heavier than those born of mothers who did not enter the hospital until shortly before or during labor."

#### THE DEATH DEALING AUTOMOBILE

Figures just issued by the Department of Commerce and Labor indicate a fearfully high mortality from automobile accidents. The figures from the death-registration area of the country, constituting about 82 per cent of the population state that the rate was 10.4 per 100,000, as against 9.4 in 1919, 9.1 in 1918, 8.9 in 1917, 7.3 in 1916 and 5.8 in 1915. In the five years the rate increased about four-fifths, the increase being from 3,571 to 7,433, which is an increase of 108.1 per cent.

This of course is due to two causes, the great increase of motor driven vehicles as well as the great increase in the number of careless, slow-thinking, murderous fools we in our "Freedom of Liberty" permit to go abroad dealing death to the unwary, often to the wary, for it is well recognized that in these particular cases the well intentioned, skilled, thoughtful driver is at the absolute mercy of any careless fool he may meet upon the road. The advice given the writer several years ago, as he purchased his first "tin Lizzie", "Dr. you must drive just as if every other fellow you meet in the road is a fool and careless". It also recalls the little squib depicting the plight of the fellow who had the right of way and knew it, yet he was just as dead as if he had been wrong.

#### THE DOCTOR AND THE ENGINEER.

The story is told of a doctor in England at the time of the great railroad strike who, when called upon to attend the child of one of the striking engineers, declined to go, saying he was himself "on a strike." The engineer pro-



tested that such a thing was impossible. The doctor's work was for "humanity." "No more than is yours," was the reply. Of course the doctor went. But he had first taught his lesson.

No one supposes that in the strike vote recently taken the men of the American railroads were consciously voting to disregard the call of a large section of humanity. No one supposes that they were voting wilfully to defy an order of the United States Government. They were not offering by their votes any discourtesy to the international delegates who are to arrive at about the time of the proposed strike to begin their conference on disarmament. They were simply voting as men in any other occupation would have voted when asked if they wished to have their wages, salaries or incomes reduced. They doubtless did not think of themselves as in the posture of the doctor with relation to humanity, though, as a matter of fact, they are more essential to the physical happiness of the great urban populations than any other group except the farmer with whom they help to support the rest of the world.

—N. Y. Times.

### *Editorial Notes—Personal and General*

**Kay County Medical Society** met at Ponca City, October 13.

**Dr. and Mrs. K. D. Gossom**, Custer City, visited California points in October.

**Dr. and Mrs. S. H. Welch**, Dacoma, have returned from a months visit to California.

**Dr. A. L. Blesh**, Oklahoma City, attended the American Surgical meeting in Philadelphia.

**Dr. R. R. Smith**, Tulsa, was badly bruised recently when his car collided with another.

**Dr. J. L. Mosley**, Temple, underwent an operation for appendicitis at El Reno in October.

**Dr. and Mrs. J. T. Riley**, El Reno, attended the American Railway Surgeons Chicago meeting in October.

**Dr. C. P. Linn**, Tulsa, is in Hot Springs, Ark., recuperating from an enervating illness of several weeks.

**Dr. R. L. Pendergraft**, Hollis, has returned from Chicago where he attended the eye, ear, nose and throat clinics.

**Dr. C. M. Fullenwider**, Muskogee, attended the meeting of the American Congress of Surgeons, Philadelphia, in October.

**Dr. and Mrs. F. H. Clark**, Oklahoma City, motored to Kansas City for the meeting of the Medical Association of the Southwest.

**Dr. and Mrs. J. E. Davis**, McAlester, announce that that "Chesty" look Dr. Davis has recently acquired is due to the recent arrival of a son and heir.

**Dr. C. A. Johnson**, Wilson, was elected as one of the state delegates at Enid to represent the Wilson Post at the American Legion Convention, Kansas City.

**Dr. W. D. Berry**, Muskogee, attended the Philadelphia meeting of the American Congress of Surgeons. On his return he will be joined by Mrs. Berry at Louisville.

"**Babe Ruth**", it is said, would liven up the ex-soldier boys at the University Hospital by paying them a visit, accompanied by his entire aggregation of barn-stormers,

**Dr. R. N. Donnell**, Muskogee, recently forgot his car was not in reverse-result-ploughed right on through a plate glass window. No "Choc" just plain forgetfulness.

**Dr. D. Long**, Tallihina, Superintendent of the State Tuberculosis Sanatorium, motored to Boonville, Arkansas, for the purpose of investigating the system in vogue at the State Sanatorium there.

**Oklahoma County Medical Society** observed 'Cancer Week' in fitting style by holding a meeting where carefully prepared papers were read to an audience composed of both physicians and the public.

**Miss Olive Salmon**, Oklahoma City, was elected President of the Oklahoma State Nurses Association, at the meeting of October 14th. Sister Mary Lucia, of St. Anthony's Hospital was elected Secretary.

**Drs. J. B. Shannon and J. W. Stevens**, the former of Pauls Valley, the latter of Maysville, have perfected an unusual arrangement, in that each changes locations, by the simple expedient of "swapping" locations.

**Dr. and Mrs. W. W. Gill**, Gracemont, announce the marriage of their daughter, Agnes to Mr. Robert M. Johnson. Mr. Johnson has just returned from Europe where he has been with the army of Occupation in Germany.

**Tulsa Physicians' Parking** privileges have become to be so abused by imposetors who have attached the physicians emblem to their cars that the Tulsa County Society has gone to the City authorities asking that prohibitive ordinances be enacted.

**Dr. and Mrs. E. S. Ferguson**, Oklahoma City, visited New York in October, incidentally looking in at the meeting of the Philadelphia meeting of the Clinical Congress, American College of Surgeons and the American Laryngological Association.

**Tulsa Baptists Plan Hospital** of 200 beds according to recent announcements will be erected by the Delaware Baptists Association, which is composed of members of that church residing in Washinton, Nowata, Rogers, Osage, Creek and Tulsa Counties.

**McAlester Cancer Week** was well staged by Pittsburg Society. Dr. McCarley, delegated to execute the meetings, called twelve representatives from as many organization and this body organized for a wide presentation of the subject throughout the county.

**McIntosh County Society** met at Eufaula Oct. 11th, Dr. W. A. Tolleson, Secretary, publishing the program as follows: "Typhoid", Dr. L. L. Jacobs, Vivian: "Coughs and Colds", a general discussion thereon; this being followed by clinical presentations and case reports.

**A Sense of Humor** pervades the management of the Oklahoma Press Clipping Bureau, Oklahoma City. This without a doubt, for recently, as a part of the "clippings" of interest to and concerning doctors, THE JOURNAL received announcement of changes in an undertaking establishment at Haileyville.

**Tulsa County Society** issued call for a meeting for October 10th, Drs. C. H. Ball and Vernon L. Turrill being on for papers. Dr. R. W. Dunlap, Secretary, issues a weekly Bulletin to the members, which conveys items of interest to the profession. The last issue carried notice of the marriage of Dr. Bertha Margolin, Tulsa, who is now Mrs. Leonard.

**Alfalfa County Society** took an active part in observation of "Cancer Week". Under direction of Dr. H. A. Lile, Cherokee, Chairman, comprehensive programs, providing for lay and professional meetings and which thoroughly covered the county, were staged. Meetings were held in many localities, churches and clubs and their membership participating.

**Dr. Thomas Holloway**, Oilton, was mulcted after jury trial, on charges of malpractice, which alleged that he improperly treated a fractured arm. \$1,000 as damages, \$3,000 for "personal anguish" was the way the jury decided the matter. This is one of the very rare results of such suits. Dr. Holloway was not defended by the Medical Defense Fund. Attorneys.

**Dr. R. B. Gibson**, Ponca City, read a paper on "Pelagius"; Dr. I. D. Walker, Blackwell, on "The Eye in Relation to General Medicine"; Dr. Claude Young, Arkansas City, demonstrated "Methods of Fracture Treatment"; Dr. John F. Winter, Ponca City, talked on the same subject. This society proposes to have a "Cancer" meeting in November.

**Dr. S. H. Williamson**, Duncan, recently felt the cold displeasure of the "Law" when placed under arrest by a Lawton Cop charged with illegal possession of liquor. His puzzlement did not clear up for he was not a drinking man until a crowd of his Rotary friends, whose banquet he was attending, relieved his mind by giving him the laugh. The spurious "Cop" released the desperate man.

**The Thompson Sanatorium**, Kerrville, Texas, who have been the Journals advertising supporters for several years, have found it necessary to discontinue. The Journal regrets this loss of an old friend, but we agree with the principle that the Journal's advertisers should receive a proper return for their support, and if they do not, that ends the matter and we feel that under no circumstances should we accept money under such conditions. If the Oklahoma profession has not seen fit to refer cases to the Kerrville institution in the past it has failed in the performance of a duty owed to a friend and supporter and the only course to be followed by the advertiser is to withdraw from the field.

**Dr. and Mrs. Wm. H. Bailey**, Oklahoma City, made a joint issue of the meeting of the Medical Association of the Southwest and the American Legion Meeting at Kansas City. Dr. Bailey goes from Kansas City to Chicago, Battle Creek, and from that point travels to Hot Springs to attend the meeting of the Southern Medical Association.

**Dr. M. W. Gayman**, Ralston, has moved to Hominy.

**Woodward County Society** met in Woodward September 27th, the feature being an orthopaedic clinic conducted by Dr. Earl D. McBride, Oklahoma City, at the Woodward Hospital. Another feature was the luncheon tendered at the home of Dr. and Mrs. C. W. Tedrowe by the Woodward Clinic. At the evening session Dr. McBride related his experience during his recent European trip. Dr. J. M. Workman presided at the meetings.

**Okmulgee County Society** observed "Cancer Week" by presenting the subject to professional and lay audiences. President Pigg appointed the following committees to handle the matter: Okmulgee, Dr. Frank Howell, Henryetts-Dewar-Kusa, Dr. Harry E. Breese; Coalton and Schulters, Dr. J. P. Nelson; Beggs-Preston, Dr. J. L. Minor. For the colored people Dr. J. E. Guess and Dr. Sanders. These chairmen were to appoint their fellow committeemen.

**Dr. J. A. Smith**, McAlester, has moved to Roswell, New Mexico. The Pittsburg County Society at a meeting October 13th adopted resolutions of regret at his departure and of commendation of him to the people of his new location. The resolution declared that in his eighteen years of residence at McAlester he had endeared himself both to the people and members of his profession, that his departure loses them a citizen of the highest type. The matter was requested publication in the Journal.

**Nurses and Plumbers-A comparison:** Is eight dollars per day for a trained nurse exorbitant when a plumber gets twelve dollars per day? This is the very pointed query emanating at the thirteenth annual meeting of the State Nurses Association at Oklahoma City. The eight dollar fee was fixed last year as proper, but it is said to be considered exorbitant in some quarters, even so by some nurses themselves. From the agitation there seems to be a reduction in nursing charges in sight in the near future.

**Miami Baptist Hospital**, according to Mr. Grant Victor member of the State Soldier Relief Commission, will probably be designated as one of the institutions rendering care to disabled ex-soldiers. For months this institution has had a tender of forty-five beds on file with the Director Veteran's Bureau, Washington, D. C., tiring of inactivity on the part of Washington, the Hospital sent the following telegram:

"Mr. C. R. Forbes, Director, Veteran's bureau, Washington, D. C.

The Miami Baptist Hospital at Miami, has tendered to the bureau for several months past forty-five beds for use ex-service men. Subordinate officers in the bureau have paid no attention to the generous offer as well as the advantages. The soldiers relief commission urges investigation of the offer.

H. B. Fell, S. G. Victor and Horace H. Hagan, Soldier's Relief Commission of the State of Oklahoma."

Mr Victor said recently that Texas Institutions now getting the ex-soldiers for treatment are using their influence against local hospitals in Oklahoma being designated for this purpose. Hence, the suggestion in the above telegram that subordinate officers are suppressing the offer. There is no doubt but this pernicious activity on the part of Washington Employees has brought great criticism on the whole work. Their tendency to suppress important matters, which should come to the eye of the superior officers, is well known to the men having business with the bureau. If their resignations were asked for, so they could purchase a ticket back home, the ex-soldier would be better off.

**A Nurses Union?** there is in the opinion of Dr. Chas. H. Mayo, Rochester, if he is correctly quoted by the press of the country, which gives his statements as:

"the nursing situation has come to be the most autocratic closed shop in the country"; "that the leaders of organized nursing have carried their methods too far and with too high a hand, and in doing this have defeated their own purpose, for they have lost sight of the real impulse of their profession—the alleviation of the pain of the world. Ministration to the sick and dying cannot be bound by hard and fast laws. They are the divine right of the poor as well as the rich. A prohibitive price cannot be put upon them. And that is what the nurses are doing. Too great a commercialization of their services is making proper care of the sick impossible for those in moderate circumstances. In addition, their demands as to hours and regulations cannot be met in hospitals if the hospitals are to maintain their high standard of service. I understand that in some hospitals the nurses have even resorted to strikes. This is a shocking incident of the profession, and I cannot believe that the nurses involved were heartily in sympathy with them. They must have been misled by the agitation of one or two malcontents and incompetents. Supposing that the doctors should go on strike! The thought is no less appalling than a nurses' strike! Therefore with the union becoming a menace it is time for the public to cooperate against it.

"Seven dollars a day for an eight hour day is more than exorbitant; it is prohibitive. I means that in cases of dangerous disease where constant skilful care and watching are necessary to save the life of the patients, three nurses must be employed at a daily cost of twenty-one dollars a day. How, I ask, can the man and woman of average means afford to pay such charges? They cannot do it. Neither can the hospitals if they wish to keep open their doors."



**Venereal Demonstration Flying Squadron**, a body of highly trained men specializing in semi-public venereal disease control measures and work, functioning under direction of the U. S. Public Health Service, may make a visit to Oklahoma Cities if enough interest is evidenced by municipalities and proper efforts made to secure their services. The work of the Squadron has the approval of health officers and specialists in the work generally. Dr. J. C. Mahr, Oklahoma City, in control of the work in Oklahoma, is attempting to have them visit Oklahoma.

**Woods County Society** held its reorganization meeting at Alva, September 27th. Dr. E. O. Templin, Secretary, Alva, reports a good meeting, the program containing an address by Miss Martin, Public Health Nurse. Dr. J. C. Mahr, U. S. Public Health Service, Oklahoma City, in charge of the Venereal Disease Control work in Oklahoma, read a paper on "The Treatment and Control of Venereal Diseases", which was freely discussed. The meeting re-assembled in the evening at which time a banquet was served the attendants, Dr. C. H. Hale, Alva, acting as toastmaster, eliciting responses from Drs. W. S. Cherry, Templin, Mahr and Miss Martin.

**Okmulgee County Society** held its annual Fall Reunion or "Get-Together" meeting, October 10th, at the Country Club.

The program: "Ileio-Colitis", Dr. W. C. Griffin, Weleetka, discussion opened by Dr. A. G. Hughey, Dewar, "Mastoid Abscess" by Dr. R. L. Westover, Okmulgee, discussed by Dr. C. C. Whittle, Henryetta. "Facts and Fallacies" by Dr. R. J. Crabill, Citra; discussion opened by Dr. F. A. Howell, Okmulgee. Dr. Crabill was welcomed by a large circle of old timers in Oklahoma and Indian Territory Medicine, who still recall him as the man of many good qualities, and a pioneer of our early medical days and struggles. Luncheon was served the visitors at the Country Club.

**The Trowbridge Training School**, an institution for the scientific care, training and education of mentally backward or retarded children has joined our advertising ranks. Their location, 2827 Forest Ave., Kansas City, Mo., is in one of the choice districts of that city. They are fortunate in owning beautiful buildings and spacious grounds and have every modern equipment necessary to the proper conduct of such an unusual work. Personal supervision is accorded each pupil by teachers especially skilled and trained in their specialties. Oklahoma physicians should keep this institution in mind for we have in the aggregate many children who may be saved from mental inferiority and eventual uselessness as citizens if they are taken in hand in time. The school comes to us with the highest references as to ability and worth.

"Is your last baby paid for? Is the very pertinent question, with many others, in a published advertising page of the *Memphis News Cimeter* of October 13th. The advertisement, presumably paid for by the Memphis medical profession, reminds the public of the long, tiresome, back-breaking hours devoted by the doctor to the ushering into the world of the infant. "Is your baby mortgaged?" is another question, the Doctor will remember the mortgage if the parent does not. "Honest parents pay their doctor's bills". They set a good example for their children to follow. The matter is set in bold, black-faced type and is so unusual that it is noted here with the idea that it might help well to reproduce it in many Oklahoma localities.

**Drs. H. C. Wallace and G. J. Conley**, Blackwell, Osteopathic physicians, according to press dispatches, are defendants in a \$10,000.00 damage suit, the allegation being that she underwent operation on a diagnosis for a tumor which did not exist. Blackwell seems to be more than active with respect to its attorneys bringing these suits. Perhaps the Blackwell doctors might try, with good effect, administration to the legal fraternity a dosage quantum sufficient of their own medicine, for if there ever was a poorly equipped profession on earth it may be found on investigation of the average attainments of the Oklahoma lawyer. Malpractice on his part would not be difficult to unearth.

**The Fourteenth Annual Christmas Seal Sale** will be conducted in Oklahoma under the auspices of the Oklahoma Public Health Association, during the month of December. The Association is in charge of a state wide public health Program including public health Nursing, Tuberculosis and Child Welfare dispensaries, Health Centers, School Health Activities and General Health Educational Campaigns. Activities are carried on throughout the entire State under the direction of sixty-five county public health committees and eleven local associations.

The Medical profession has been instrumental in advancing this growing health program and will undoubtedly lend its full support to the annual fund raising campaign.

Further information can be obtained from the headquarters of the State Association at 315 Oklahoma Building, Oklahoma City.

**Jackson-Greer and Harmon County Medical Society** held its quarterly meeting at the Elks Club Rooms at Altus, October twenty-first. The proceedings appropriately opened up with a banquet, Dr. C. G. Spears, Altus, being toast-master. His address of welcome, in part registered his belief in such an organization doing good, in that, it gave the physicians a chance to mix and mingle to get the view point of the other fellow, exchanging good for good. Drs. G. T. Ray, Gould, and Frank H. McGregor Mangum, responded. A clinic was also held.

**Dr. A. E. Abernathy**, Altus, read a paper on "Headaches of Nasal Origin"; Dr. W. P. Rudell, on "Endocrinology"; Dr. J. S. Stultz, Olustee, on "Modern Treatment of Septic Abortion"; Dr. D. L. Garrett, Altus, on "Surgery of the Gall-Bladder". The meeting was very well attended, Dr. Nay Neal, Mangum, the President, presiding.

**Dr. Dwight H. Murray**, Speaker of the House of Delegates, A. M. A., Syracuse, N. Y., is dead as a result of an acute attack of valvular heart disease. The death of Dr. Murray is a distinct loss to the American Medical Association and the American Profession. He was one of the few men measuring up to unusually high standards, one of the few fitted by natural forces, augmented by thorough study, to take the place of leader and director, not only in medical problems, but many of the perplexing situations which now menace society, in other words, he was a man fitted to occupy high places in the stage of modern civilization and its turmoils. He was 60 years old. After thorough preparation in the United States he studied in Europe, afterward directing his efforts mainly to proctological and gastro-enterological work. Those of us who observed his work as Speaker of the House will realize that his equal will be difficult to find.

**Muskogee County Medical Society** held a meeting in answer to a petition calling for such, October 19th, the object being to determine what action should be taken with reference to "Cancer Week", October 30 to November 5th. Consensus of opinion of the meeting was that no effort would be made to arrange public meetings or to advise the laity in any manner as to cancer prevention or control, but it was decided that one meeting, October 30th, would be held and devoted to medical papers on cancer. It is believed the unusual decision not to cooperate with the National Committee for the Control of Cancer by cooperating with and initiating meetings at which the public should be invited to attend, is a result of several recent political and economic attitudes adopted by people of Oklahoma. The general idea of many good physicians seems that no effort of the physician either individually or collectively to warn the public of dangers incident to certain diseases and infections, is appreciated or understood by the public, that no credit or thanks accrues to the doctor for such gratuitous service, and that mostly his attempt is given the blackest interpretation possible, as having arisen from selfish interests and not altruistic desire to be humanely helpful to his ignorant fellowman. With that general idea as a basis, it was determined to hereafter, as far as could be, adhere strictly to the slogan, "Attending to Our Own Business." This attitude we may or may not regret hereafter, the end remains to be seen.



**Midwestern Association of Anaesthetists** meeting at Kansas City went on record as to the charges of Dr. J. F. Baldwin, Columbus, Ohio, as follows:

WHEREAS the middle western states are being circularized with false and misleading statements regarding the general practice of anaesthesia and particularly the use of nitrous-oxid oxygen, and

WHEREAS the Mid-Western Association of Anaesthetists is formed for the study and promotion of truth as it relates to the specialty of Anaesthesia in medicine, now therefore

BE IT RESOLVED that this society, in convention assembled, condemns the statements and the actions of Dr. J. F. Baldwin of Columbus, Ohio, in his utter disregard for truth and official records of recognized institutions as these relate to the practice of anaesthesia and his efforts to discredit scientific advance by the unethical practice of disseminating false and misleading statements among medical, dental and hospital authorities throughout the United States.

**The American Legion**, Annual meeting at Enid, September 27th, adopted the recommendation of its Hospital Committee that Oklahoma City be selected as the site for the proposed \$1,000,000.00 hospital for ex-service men. While this decision is not necessarily final, it probably will have that effect in the end, as the decision no doubt rests upon sound principles and was made after due study by the committee which had before it the offerings from the various cities contending for the location. The State press very generally concedes the wisdom of the selection, the McAlester News Capitol voicing the prevailing opinion in its statement that:

"It is gratified.... that the Legion..... expressed opinion that the hospital should be located at Oklahoma City. Oklahoma City is the logical place.... not only because the city has a competent corps of professional men.... or because the University Hospital is already located there, which will be a decided adjunct to the new institution, but also because it is the geographical center of the state and is more accessible from all parts of the state, than any other city."

The commission empowered to select the site is composed of H. B. Fell, Ardmore, State Commander of the Legion; Horace Hagan, Tulsa, former commander and Grant Victor, Afton, ex-United States Marshall for Eastern District of Oklahoma.

**The Tulsa County Medical Society** held its first session in the Knoblock Laboratory, October 24, Dr. Pigford in the chair.

Minutes of previous meeting read and adopted without change.

Dr. Lyman A. Barber was unanimously elected to membership. The Secretary announced the reinstatement of Dr. Ferguson of Tampico, Mexico.

The Secretary read a letter from Dr. Thompson, urging the necessity of the members of the Oklahoma State Medical Association patronizing the advertisers in the Journal, urging them to tell the advertisers they were patronizing them because they did advertise in the Journal. Especial mention was made of the Physician's Casualty Association of Omaha who is just giving a new contract to the Journal Drs. Wall, Price, Emerson and Wallace carry policies with this Company.

Dr. Ball reported the following assignments of speakers for National Cancer Week.

Kiwanis Club, Dr. Wall; Jr. Chamber of Commerce, Dr. Henry Browne; Lions Club, Dr. Flanagan; Rotary Club, Dr. O'Hern; Chamber of Commerce, Dr. Stallings; City Club, Dr. A. Ray Wiley; Ad Club, Dr. Clinton; Civitan Club, Dr. Summers; Secotym Club, Dr. Summers; Cherokee Hts. Men's Club, Dr. Ball; Jane Adams Chatauqua, Dr. Flanagan; Shakespeare Club, Mrs. Roth; Tuesday Book Club, Mrs. Roth; Tulsa Town Club, Dr. Stallings; Womens Club, Dr. Wall; Business and Professional Woman's Club, Dr. Ball.

Dr. Wall called attention to the necessity of making

reservations in the hotels at Hot Springs for the coming meeting of the Southern Medical Association.

Dr. Hendershot spoke of the conditions of the books and furniture, belonging to the Society, at the Chamber of Commerce.

Motion (Dunlap) that Committee be appointed to dispose of the furniture and turn the funds into the general funds of the Society. Carried and the President appointed Drs. Hendershot, Wallace and Murray on the Committee.

Dr. Ball presented his paper "Why Doctors do not Advertise" and also gave some interesting statistics from his case records.

Dr. Grosshart presented a case report which was freely discussed by Drs. Wall, Beesley, J. Winter Brown, R. V. Smith and Osborn.

Adjournment—Attendance 39.

**Oklahoma Public Health Conference**, Oklahoma City, October 11-12, was attended by 225 delegates, representing fifty counties of the State. Dr. Chas. J. Hatfield, Managing Director, National Tuberculosis Association, delivered an address on "Relative Values in the Anti-Tuberculosis Campaign", and at the section devoted to soldiers' health, an address on "The Present Status of Tuberculous Former Service Men". Dr. John A. Lapp, Editor "Nations Health," delivered an address on "Social Optimism", pointing out excellent progress made recently in social, medical and health needs of the people. Miss Harriet L. Leete, Field Director of the American Child Hygiene Association, talked on "Public Health Nursing and Child Health". Colonel Hugh Scott, Washington, U. S. Public Health Service, delivered the evening address, his remarks being on "What the Federal Government is doing for the Disabled Soldier".

Other addresses were made by Drs. L. J. Moorman, Oklahoma City, on "Tuberculosis A Disease of the Masses". David Morley Jr., Dallas, Texas, on "Purification of Water Supplies." Dr. J. Angus Gillis, Frederick, on "Agencies for County Health Improvement." R. E. Luhn, Oklahoma City, on "Elements of Health Education Campaign". C. W. Richards, Ardmore, on "Teaching Health to School Children." R. O. vonThurn, Tulsa, on "Health and Welfare Service in a Large Industry" and Chas. E. Dierker, Shawnee, on "Fraternal Organizations and the Health Campaign."

The Annual Report of Mr. Jules Schevitz, General Secretary, submitted at the opening session, severely criticized the Eighth Legislature for its failure to pass a bill providing for a bureau of Child Hygiene in the State Department of Health. Mr. Schevitz charges that "political chicanery was the cause of failure of passage". He also blames the Legislature for failure to provide adequate funds for tuberculosis sanatoria in the state. Many representatives were present from the Rotary, Lions, Kiwanis, Civitan and Civic Clubs of the State. Chambers of Commerce had many representatives, while physicians, nurses and health officers participated. The annual banquet was addressed by Governor Robertson who took special notice of progress of Oklahoma health agencies and campaigns.

Officers elected were: President, J. F. Owens; President Emeritus, E. K. Gaylord; Vice-presidents, C. W. Gunter, Oklahoma City; Fred Struble, McAlester; Tams Bixby, Muskogee; Secretary, Jules Schevitz, Treasurer, J. Henry Johnson, Oklahoma City.

**Oklahoma Medicine and Surgery**, will be the title of a volume to be issued by the Warden Company, Oklahoma City, edited by Dr. Claude Thompson, Muskogee. The work will be very comprehensive, undertaking to set forth early tribal medicine, which was succeeded by Territorial days, and that by the State of Oklahoma. Medical schools past and present, their founders, hospitals, medical legislation, the Oklahoma doctor in the Great War, in fact everything to which the doctor of today and the past put his hand and brain will find lodgment in the work. Announcement will be made later of details.

**DOCTOR WILLIAM TIDBALL**

Dr. William Tidball, Sentinel, is dead. Death came to Dr. Tidball as a result of apoplexy, his illness proving fatal in two days. Dr. Tidball was born at Clinton, Ill., Sept. 5, 1857, and died at Sentinel September 23, 1921. Moving to various western points with his family during his childhood he received such rudimentary education as was available in the unsettled times, finally, after years of determination, work and singleness of purpose, he reached the goal of his ambitions and received his medical degree from the Memphis Hospital Medical College, in 1889. He then located at Siloam, Ark., living there twelve years during which time he improved the hour by appropriate visits and postgraduate work in Chicago clinics. Married to Miss Jennie Heiney at Berryville, Ark., Sept. 5, 1885, they were blessed with ten children, Mrs. Tidball and seven of them are left to mourn his loss.

Dr. Tidball was an outspoken Republican in politics, to which party he gave much of his time, and from the connection and enthusiasm he was dubbed the "Black Republican of Arkansas", his activity winning for him the empty honor of Republican nominee for Governor many years ago, but due to failing health he had to move to Roswell, New Mexico, where he remained until his removal to Washita County in 1900. He was a very sociable man, popular socially, member of many fraternal and civic organizations. At the age of 30 he joined the Church of Christ being active in its works until death, as well as giving his active support to the Masonic, Odd Fellows, K. of P. and various fraternal organizations. He was associated professionally in the practice of medicine with Dr. D. W. Bennett in 1903 which connection existed for several years, the two men after formal dissolution remaining on most intimate and helpful terms, each knowing more of the personal affairs of the other than any other person. His passing is a distinct loss to Washita County.

**THOMAS LEE CHAMBLISS.**

Dr. T. L. Chambliss, Hugo, died at his old home in Kent, Saturday, October 15th, 1921, after a lingering illness of many months. Dr. Chambliss was born at Cooper, Texas, February 14, 1880, receiving his literary education in the common schools of Texas, after which he was graduated from the Ft. Worth Medical College in 1907. He, like many others, was compelled to do such practice as opportunity and his abilities offered, engaging in such work as early as 1901 in various communities in Southeastern Indian Territory, in what is now Pushmataha and Choctaw Counties. He had made Hugo his home for ten years until a few months ago, failing health warned him to attempt recuperation of his ebbing vitality, which he did by moving to California. The trip proved a disappointment and he returned to Oklahoma to spend the remainder of his days with his family and friends.

A wife, step-son and step-daughter and one brother survive him. His remains were interred in the Antlers cemetery, in which town he practiced in 1909 and 1910. A large number of friends from Hugo made a final visit to tender their last honors, sympathies and respects to their departed friend.

**MISCELLANEOUS****TIME TO RETIRE  
The Oldest Doctor.**

Dr. Charles Smith, who lives in Egg Harbour, N. J. has just celebrated what he says is his 145th birthday and has decided to retire from active practice and take a rest in his declining years.

Just as with most persons who claim extreme longevity, there is nobody old enough to prove either that he is right or wrong about his age, but the opinion of his friends and relatives is that he is at least well over 100 years.

The interesting thing about it is that the doctor is healthy, happy and full of a lively interest in modern topics, including big league baseball. He has a sense of humor which age has not withered nor custom staled.

Such cases prove that old age is dreadful only "as thinking makes it so," as long as one may keep his health and senses. And this, it is coming to be recognized more and more, is a matter of right and temperate living.

*Tulsa Tribune.*

**HIGH-POTENCY ANTITOXIN**

The reticence which formerly characterized the attitude of certain physicians toward the injection of large doses of antitoxin in cases of diphtheria has almost entirely disappeared. This, in no small measure, is attributable to the enterprise of biological manufacturers in developing new and improved methods of antitoxin production.

The diphtheria antitoxin put out by Parke, Davis & Co. is remarkable for its concentration and purity. The total solids in this product have been reduced to a minimum, thereby practically eliminating the possibility of anaphylactic reactions. The high concentration of this antitoxin makes feasible the injection of an adequate number of antitoxic units in small bulk—a most desirable quality, since the pain and discomfort resulting from the injection are negligible and, if given subcutaneously or intramuscularly, absorption is hastened.

**Abstracts, Observations from Current Medical Literature****ABSTRACTS FROM ORTHOPEDIC ARTICLES**

Legg's Disease or Perthes Disease; the differential diagnosis of affections of the hip joint, in children.

H. Buckley Roderick O. B. E., M. A., Mch., M. D.  
(*Cantob. Lancet Jan. 29 1921.*)

He divides the symptom of "limping" into two classifications.

(A). Painless limp. 1. Shortening of limb. 2. Paralysis. 3. Stiffness of one joint.

In this class the limb is not spared as a means of support but is used to the full.

(B). Painful limp;

In this case patient stiffens all the joints by muscular action and avoids putting any weight on affected side.

Other conditions causing fixity of the joint are: 1. Subacute infections. 2. In adolescents arthritis deformans sometimes is found. Injuries are not discussed. Non-traumatic deformities apart from Legg's disease are: 1. Congenital dislocation of the hip. 2. Infantile paralysis of the gluteal muscles. 3. Coxa Vara. 4. Coxa adducta (similar to coxa vara). Legg's disease.

Leg of Boston first described it in 1909 under the title of "an obscure affection of the hip joint". In 1910 Perthes of Tübingen reported cases of "Arthritis deformans Juvenilis" and later in 1913 after having removed a piece of synovial membrane and a piece of the head of the femur from one of these cases and finding no evidence of inflammation he named the condition "Osteochondritis Deformans Juvenilis". In 1910 Calvé called it Pseudo-coxalgia.

It occurs in children 3 to 12 years usually in boys. It is not common. Delitala found only 6 cases in 1500 cases of hip affections. It simulates hip disease because of pain and limp. Abduction and internal rotation are markedly restricted. Flexion and extension are free and painless.

X-ray in typical case show the head is flat and irregular and broken up. The epiphyseal line between the head and neck is irregular or even segmented. The acetabulum may be blurred.

The characteristic feature of the disease is the astound-



ing X-ray picture associated with little or no disability.

Etiology: A large percentage of cases give history of injury 4 to 6 months previous. He thinks and gives anatomical evidence to prove that the condition is due to trauma, producing degeneration in the epiphyseal head of the femur.

Treatment: Fix the thigh in an abducted position in a plaster cast during the acute stage. The symptoms usually clear up inside of one years time.

Earl D. Mc Bride, Oklahoma City.

## NEW BOOKS

### THE SPLEEN AND SOME OF ITS DISEASES

The Spleen and Some of its Diseases. By Sir Berkeley Moynihan, of Leeds, England. 129 pages with 13 full page diagrams, Philadelphia and London: W. B. Saunders Company, 1921. Cloth, \$5.00 net.

This work by England's most eminent authority is based upon "The Bradshaw Lecture", delivered by the Royal College of Surgeons of England in December 1920. Noting that surgery of the spleen heretofore has been largely limited and restricted to removal of the enlarged or diseased organ, or the normal organ with twisted pedicle, or to acute pus forming infections of it, but that in late years the importance of surgical treatment of it as incident to cirrhosis, pernicious anemia, hemolytic jaundice etc., as well as the role the organ plays in the etiology of diseases of other organs, is made, and justifies the work. Fourteen chapters dealing with anatomy, surgery, functions, pathology, clinical aspects, anemia, leukemia. Hodgkins disease Splenic anemia (Banti's disease, hemolytic jaundice, Polycythemia (Gaucher's or Von Jaksch's disease), diagnosis, relations of the liver to the spleen and conclusions, are the subdivisions of the book.

It is unnecessary to narrate on the worth of the work. It is the last word up to now.

### HISTORY OF MEDICINE

(New Third Edition)

History of Medicine, With Medical Chronology, Suggestions For Study and Bibliographic Data, by Fielding H. Garrison, M. D., Lt.—Colonel, Medical Corps, U. S. Army, Surgeon General's Office, Washington, D. C. Third Edition. Revised and Enlarged. Octavo of 924 pages with 257 portraits. W. B. Saunders Company, Philadelphia and London, 1921. Cloth, \$9.00 net.

This revised edition notes advances since its predecessor issued just prior to the World War, which, of course, means a wide range of matters. The author rather takes to task Mr. H. G. Wells for forgetting in his "Outline of History", to note the influence of medicine upon human progress. That attitude is correct. Without medicine, proper medicine, applied to the needs of our races today, civilization would soon perish from the face of the earth. This work is a decided improvement over other issues in that it includes many of the newer things. Our only objection, stated before as to this history, is the omission of the name, among the biographical pages, of the man many believe to be one of our greatest surgical clinicians, Dr. A. J. Ochsner. We believe, comparatively speaking, that his work deserves the recognition shown by recording in medical history of this country.

Nostrums and Quackery. Articles on the nostrum evil, quackery and allied matters affecting the public health reprinted with or without modifications, from *The Journal of the American Medical Association*. Volume II, Illustrated, 832 pages. Published by the American Medical Association, 535 N. Dearborn St., Chicago, Ill. Price \$2.00.

Ten years ago the American Medical Association published the first edition of the first volume of this book. A year later a second, and enlarged edition was issued. Since that time *The Journal of the American Medical Association* has published, week by week, articles on the nostrum evil, quackery and allied matters affecting the

public health. All this material has been collected and appears in the present volume.

Quackery can never be defended; the "patent medicine" business, however, need not be fundamentally fraudulent. There is a place for home remedies for the self-treatment of simple ailments. Unfortunately, the home remedies of today are, generally speaking, those secret nostrums commonly called "patent medicines" and the methods of "patent medicine" promotion make these products a menace to the public health. The average "patent medicine" is so advertised as to frighten well people into the belief that they are sick for no other purpose than that of causing them to purchase the nostrums.

The present volume is a veritable encyclopedia of information on the subject it treats. The book contains nineteen chapters. The titles of some of these are: "Alcohol, Tobacco and Drug Habit Cures," "Constipation Cures," "Cosmetic Nostrums," "Deafness Cures," "Epilepsy Cures," "Nostrums for Kidney Disease and Diabetes," "Medical Institutes," "Miscellaneous Nostrums," "Obesity Cures," "Quackery of the Druggess Type" and "Tonics Bitters, Etc."

This partial list of chapters gives but a poor idea of the vast fund of information contained in the book. To make the volume still more valuable it contains an index of twenty-two pages, two columns to the page, which includes references to every article appearing in the first volume of "Nostrums and Quackery" as well as to all articles in the present volume.

The book is free from stilted or highly technical language. The articles have evidently been written with the idea that the facts they contain belong to the public. In the Preface, it is emphasized that the work which this volume represents is wholly educational in character—not punitive. "The matter that appears in this book has been prepared and written in no spirit of malice and no object except that of laying before the public certain facts the knowledge of which is essential to a proper conception of community health."

### OFFICERS OKLAHOMA STATE MEDICAL ASSOCIATION, 1921-1922.

President, Dr. G. A. Boyle, Enid (1921-1922)

President-Elect, Dr. McLain Rogers, Clinton (1922-1923)

First Vice President, Dr. J. A. Walker, Shawnee.

Second Vice President, Dr. J. C. Best, Ardmore.

Third Vice President, Dr. L. B. Torrance, Okmulgee.

Secretary-Treasurer-Editor, Dr. C. A. Thompson, 508 Barnes Bldg., Muskogee.

Associate Editor, Councilor Representative, Dr. C. W. Heitzman, 508 Barnes Bldg., Muskogee.

Delegates to A. M. A. Dr. L. J. Moorman, Oklahoma City, (1922) Dr. J. M. Byrum, Shawnee, (1922-1923)

Meeting Place, Oklahoma City, May 1923.

### STATE BOARD OF MEDICAL EXAMINERS.

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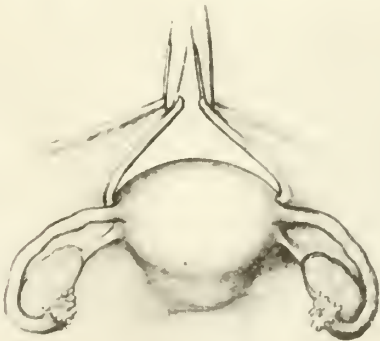
NUMBER 12

### THE INTERSTITIAL TRANSPLANT OF THE ROUND LIGAMENTS FOR RES- TORATION OF THE RETRO- VERTED UTERUS\*

McLAIN ROGERS, M. D., F. A. C. S.  
Clinton, Oklahoma

Taking for granted that associated conditions in a given class of retro-displacements of the uterus are favorable for the shortening of the round ligaments for restoration, we wish to discuss the method of interstitial transplan- tation as described by its originator, Dr. Yeatman Wardlow, in Dec. 1919, number of *Surgery, Gynecology and Obstetrics*.

Since the publication of Dr. Wardlow's articles we have operated upon thirty-two cases by this method. While this limited number of cases and short time for follow up records are insufficient for definite and stable conclusion, we are justified in stating that so far it has proven much more satisfactory than any other method we have utilized.



—Drawing After Yeatman Wardlow

In facilitating the technique of this operation Dr. Wardlow devised an instrument, which he designates as a 'Hypsterotome', which consists

of a blade of curvatures, length and other dimensions suited to make passage in curved direction thru the uterine wall. It is fitted with cutting edges at point only, while the shaft consists of a rounded dilating or non-cutting portion. Dr. Wardlow has these blades made in three sizes for various classes of cases and fitted with an interchangeable handle which permits of the shifting of the direction of the blade at the convenience of the operator and to meet any necessity for variation in a given case.

The essayist has utilized a uterine curet to improvise an instrument for this purpose by bending to proper curvature and filing at such angle as to make cutting point and edge and drilling small hole thru blade to carry ligature. This instrument happened to be of such size, tapering from small end to gradually larger size, as to be well adapted for this purpose.

#### Steps of Operation

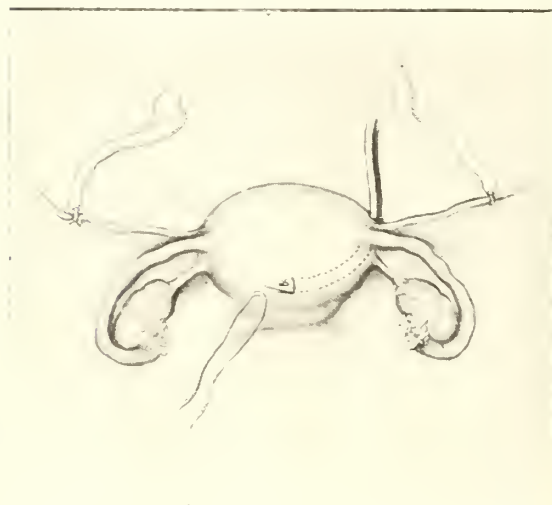
After opening abdomen and elevating uterus the round ligaments are caught by mouse tooth forcep at such point as will allow approximation directly backward on posterior surface of uterus and at this point on ligaments, apply catgut ligature by having a twelve inch ligature with both ends threaded into eye of catgut needle and passing needle under round ligament, where forceps are applied, remove needle from suture and pass two ends thru loop and tighten loop on ligament, applying hemostat forceps to distal ends of suture, repeat procedure on opposite ligament. Supporting uterus in one hand the hysterotome is inserted into the tissues at point of origin of round ligament on anterior surface of horn of uterus and rather to anterior margin of same. The instrument is now passed backward thru uterine horn, just under interstitial portion of tube, keeping instrument beneath surface vessels at this point, and continuing its direction slightly downward and inward thru the uterine wall to a point in median line about one inch below the top of fundus uteri.

Here the point of the instrument is caused to emerge thru small incision previously made thru outer layers of uterine wall. The eye of instrument is now threaded, carrying loop back thru passage as hysterotome is with-

\*Read in Surgical Section, 29th Annual Meeting, Mc- Alester, May 18, 1921



drawn. If, before withdrawing the hystero-tome, a mouse tooth forceps is applied to posterior portion of puncture wound, including tissue of round ligament, it will steady the uterus and facilitate work for the following steps. The ends of traction loop of ligament are now passed thru loop extending thru uterine passage and traction made, bringing traction loop of ligaments thru interstitial passage. Now make traction on traction loop, pulling round ligament thru passage and at same time push the fundus forward and slightly to side of engaging ligament, traction is continued until ligament is brought into view at distal end of passage on posterior surface of uterus. After repeating this procedure on opposite side, the ends of traction loops are tied, ap-



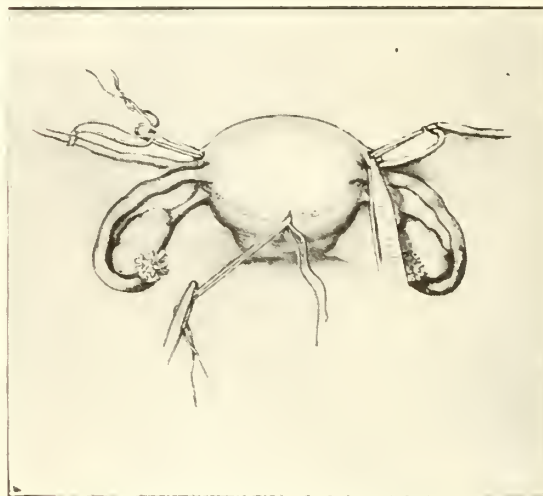
—Drawing After Yeatman Wardlow

proximating round ligaments which drop out of sight in surface wound on posterior surface of uterus, which is closed with small catgut stitch.

If operation is neatly performed there should be no hemorrhage after completion, consequently no necessity for suturing puncture wound, but if upon completion there is hemorrhage, small catgut suture should be applied as control. If for any reason the tube is removed the point of puncture may be at this point, with the further technique as described above. As pointed out by Dr. Wardlow, we utilize the muscular portion of ligament in loop carried thru uterine passage and leave the strong tendinous portion as a sustaining medium.

Care should be used not to get the ligaments too tight, causing a constant pull and strain and subsequent pain, there being no necessity for over-correction in the use of this method to restore backward displacement.

Good results following this operation depend to a greater degree upon neatness, kindly handling of tissues and small amount of trauma, than in most other pelvic operations.



—Drawing After Yeatman Wardlow

At time of publication of Dr. Wardlow's paper, Dec. 1919, he and his associates reported 118 operations, ranging over a period of about four years. Of the 118 cases, 67 were married at time of operation or had become married since. He reported among his series 15 pregnancies. Three pregnancies were still in progress at time of his report, two confessed criminal abortions and ten children born at full term, with all the children delivered without complication and in none of the mothers was there a relapse to former uterine displacement. In the series of 118 cases Dr. Wardlow reports only two cases as failure of cure and in these the uterine position was improved.

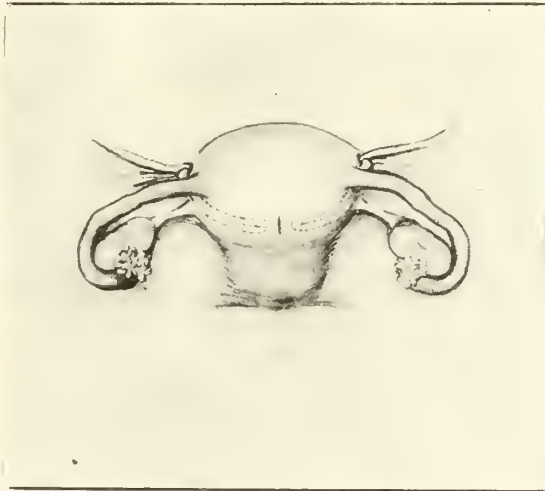
In our series of 32 cases none have yet withstood the ordeal of pregnancy, but have had most satisfactory recovery from operation and from written reports from these patients and examinations we are much gratified with results.

#### Advantages

1. It is a proper anatomical adjustment giving physiological results.
2. It utilizes the strong tendinous portion of ligament as a sustaining medium and weakened muscular portion is buried, lessening the danger of adhesions.
3. That the portion of interstitial transplant being more muscular will take on the hypertrophic changes necessary for expansion in a pregnant uterus should this condition exist.
4. Does not disturb the curved pull thru nature's elastic ring at distal end.

5. Less liability to adhesions and consequently less symptomatology as sequela.

The gratification of an increased confidence following the use of this method and its ease of application by the average man doing surgery is the reason for choosing to present this subject to this section.



—Drawing After Yeatman Wardlaw

### Discussion

*Dr. F. L. Watson, McAlester:* I think you gentlemen are peculiarly lucky as my name is on the board and it is for a call from the court and they are going to fine me unless I report. There is very little left to be discussed on Dr. Roger's paper as he has written it so fully. It occurred to me because of the mere fact that there are so many different operations for suspension of the uterus that each one has its place, and I think we all have a different way. Taking the retroverted uterus, I think the operation as discussed by Dr. Rogers is the best I ever saw. I have done operations along these lines in a crude way. Recently I have seen the operation performed and it is very nice indeed. The only thing I could see where it would not be all right would be in cases where the uterus was too heavy; then I think the Gilliam operation is best. I have done several of these and have had no trouble. One thing is how much does the suspension correct the pain and what effect does it have on pregnancy?

*Dr. McLain Rogers, Closing:* I thank you for discussing my paper. As to the kind of uterus, I left that out for there is no end to discussion of that. I do not say this is a perfect operation. I have only done about 33 cases. I thank you.

## VENOUS THROMBOSIS, PULMONARY INFARCTIONS AND EMBOLISM AS A SEQUENCE OF GYNECOLOGICAL OPERATIONS\*

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### Introduction

Following Virchow's great work, embolism and thrombosis have not failed to command the earnest attention of the pathologist, the internist and the surgeon; consequently, there has been amassed a considerable amount of literature on this important subject. Our own interest in these important lesions has been aroused by several cases in our private practice and by the reports of several consecutive deaths recently from pulmonary embolism. It goes without saying that the prevention of embolism, if acquired to a desired degree, must be based upon the close study of every case of phlebitis and thrombosis that we may have or read about.

For a long while in our own cases, as well as with the cases of other clinicians, many patients who had phlebitis and who later developed pulmonary complications were diagnosed as having pleurisy or pneumonia without taking into consideration the possibility of any infarction. Besides we have noticed that some of our patients and those of others that died from pulmonary embolism really suffered from an unrecognized pulmonary embolism.

In our paper, therefore, we shall consider the pulmonary complications that are consequent to venous thrombosis. Our purpose in this is to attempt to call attention that such conditions often have not been observed and will present some clinical data by which we may the more readily and easily recognize them.

### *Past-Operative Venous Thrombosis. Its Pathology.*

For his broad vision of the whole subject, Dr. William H. Welch stands out preeminent among pathologists.

In the production of thrombosis, what are the factors? In accordance with the observation of most observers, we may appropriately group them under two heads—*Primary* and *Contributory*. Under the *primary* we place infection, and trauma, and under *contributory*, anatomical relations of the blood vessels, slowing of the blood stream and chemical and physical changes in the blood.

No more are we able to attribute all cases of thrombosis to one single cause than we can the failure of a wheat or oat crop. Drouth, parasites, lack of fertility, poor cultivation, or

\*Read in Surgical Section, 29th Annual Meeting, McAlester, May 18, 1921

all these agencies working together may cause the crop failure. Thus it is with Venous thrombosis; nearly always is there more than one single etiological factor to be taken into consideration. With regard to phlegmasia alba dolens, who will deny that infection is the dominant cause? But when thrombosis follows a clean abdominal operation, it is not an easy thing to draw an indictment against infection.

Many pathologists have extensively studied the process of thrombosis formation. Most everyone will agree that the thrombosis is first represented by a collection of blood platelets and in a few minutes there are added to the picture leucocytes and fibrin.

A thrombus is usually described as fibrinous or leucocytic, according to which of these two elements predominates. We are fairly certain of this much; but when we raise the question as to what causes the endothelial injury that induces the aggregation of platelets and leucocytes, we are opening a question that has not yet been settled. Is it the presence of toxins, of traumatism or bacterial invasion? These questions all ought to be answered only by sound experimental proof ere we attain the clear knowledge of thrombus formation.

However, with thrombus, we have a certain right, even on a basis of clinical observation, to speculate as to the chief causes of this condition. This we know that patients come to us in the best of condition, and undergo clean laparotomies and, in spite of all this, thrombosis develops in the leg veins; consequently we believe we are justified in assuming that operation has furnished all the necessary conditions for the developing of thrombosis. Although this complication is most common following laparotomies, it is not peculiar to any single type of operation. What agencies conducive to thrombosis, then, are common to all operations? Certainly one is traumatism of the tissues; besides we believe it to be generally agreed that it is impossible to perform an operation without the introduction of organisms.

When we take a glance at the group of cases which most often result in formation of thrombosis—myomata of the uterus, it is easily seen what an important part operative procedures play in the production of thrombosis. Hampton reports that of 69 cases of myomata, in which thrombosis developed after operation, 17 per cent were anemic, 24 per cent were suffering from infections of fallopian tubes, and a large number had pelvic congestion with dilated veins and lymphatics. Such conditions as these are supposed to favor the formation of thrombosis. Yet we notice that out of these 69 patients only one had developed throm-

bosis prior to the operation. Such facts as these seem to give abundant proof that the operation furnished the conditions necessary to the formation of thrombus.

In a hysterectomy for myoma what is there that especially contributes to formation of thrombosis? The abdomen is usually opened through a long median line incision. Through an area almost free from blood vessels the tumor is delivered by sharp dissection. Wet gauze protects infection from the edges of the wound in the abdominal wall. Large vessels are clamped in all hysterectomies, at times sutures break and are replaced. It is not always easy to be sure that vessels are not traumatized proximal to the point of ligature. Sometimes the myomata extend into the broad ligaments and in their enucleation there is left behind a large raw area of traumatized tissue. Moreover we know that the vaginal vault is richly supplied with large venous plexuses, which are frequently tortuous and varicose in multiparae. The vessels have to be cut and ligated in low cervical amputations and in all panhysterectomies. Also another large vascular area is dealt with during the release of the bladder from its uterine attachments. There is the possibility of subsequent thrombosis in all these procedures which involve trauma.

An open door here is also offered to infection. The cervical canal or vaginal vault is always opened in hysterectomies. Moreover, old chronic inflammatory processes are often harboured in the fallopian tubes. It is quite probable that the cervical canal, the fallopian tubes and the vaginal vault form the usual portals of entry for organisms. It seems perfectly reasonable to suppose that there lies a potential source of infection, when to the normal flora there is added the possibility of secondary contamination in the presence of traumatized tissue.

We have here then, a fertile field for the development of thrombosis—namely traumatized tissue and blood vessels in the presence of organisms. Therefore, in the development of the majority of the post-operative cases of thrombosis it seems that infection and trauma of the pelvic vessels are largely concerned. We disagree with Clark in his claim that most cases of femoral thrombosis develop from the inferior or deep epigastrics; nor does the evidence obtained from the autopsy table seem to support this contention. However, in the Gilliam's suspension of the uterus we may have a cause in the formation of some thrombosis in the manner that Clark has described.

Why does thrombosis occur more often in the left than in the right leg? As an explanation the anatomic differences of the return circulation of the two sides is cited. But the



attempts to answer this question have been unsuccessful, and they only remind us that we have not yet mastered all the conditions that cause thrombosis.

*Prophylaxis*—We had hoped to demonstrate a curve showing a decrease in the occurrence of thrombosis commensurate with the operating room improvement. But our own experience and that of others has been so irregular, that nothing could be derived from such a curve. However, we believe that during the past three years, the occurrence of thrombosis has markedly decreased in frequency.

The ever watchful care of details during operation seems to be our only hope to reduce the frequency of this complication. The tissues should be gently handled and sharp dissection should be used wherever possible. The legs should always be examined for thrombosed or varicose vessels before operation. We should not bind the legs too tightly with straps. We consider it perfectly proper and safe to use the Trendelenburg posture whenever necessary. Deep or heavy retractors in laparotomy should be used with care. Although we have used this precaution systematically, an examination of the peritoneum over the region of the iliac vessels very often has disclosed evidence of traumatism. We readily concur with the Mayos in getting our patients out of bed early. We believe we should proceed very cautiously in letting up a patient who has an unexplained temperature.

*The Clinical Appearance of Thrombosis*—In about 21,000 patients operated upon in the gynecological clinic of one of our large hospitals including all types of operations, both abdominal and perineal, there were 205 cases of femoral thrombophlebitis. In other words the occurrence of thrombophlebitis following all classes of gynecological operations averages about 1 per cent. The results in other clinics agree very closely with these figures. Klein of Vienna, in 1911, reported 70 cases of thrombosis following 5851 operated cases, or about 1.2 per cent. Franz gives an incidence of 4.8 per cent and Ranzi reported 1.2 per cent, in 6871 cases.

Of these 205 cases of thrombosis given above, 81 per cent followed abdominal operations, 31 per cent followed supravaginal hysterectomies, 11 per cent, panhysterectomy, 46 per cent, on the adnexa, 10 per cent, suspensions of uterus, 5 per cent, myomectomy, 8 per cent, some perineal.

### Operation

Klein says that of his 70 cases, 56 per cent occurred after laparotomies. In our own cases 8 developed thrombosis following myoma operations, and 2 of these myomata cases were complicated with salpingitis and were primarily

infected cases. Next in frequency of occurrence to myomata are the cases of salpingitis, pyosalpinx, and kindred affections of the tubes. In the incidence of thrombosis, we found in our work that ovarian cysts have about equaled the group of inflammatory cases, for 2 of our thromboses have followed operation for removal of cystic tumors of the ovary. Two have occurred after panhysterectomy for carcinoma of cervix; 3 for uterine suspensions, 2 perineorrhaphy and 3 followed appendectomies. The rest of our cases were divided almost equally among operations on the gall-bladder, the kidneys, extra uterine pregnancy, rectal, and vesicovaginal fistula operations.

It is clearly manifest from the above facts that pathological results following the removal of large pelvic tumors, especially myomata and ovarian cysts are closely associated. This fact has been commonly observed for sometime among gynecologists. Statistics in regard to this subject plainly show that out of every 100 hysterectomies from three to five per cent, will develop clinical symptoms and signs of thrombophlebitis in the leg.

Some, e. g. Strassmann and Lehmann, lay great claim to changes in the heart musculature in cases of myomata. They claim that in a very large per cent of their cases of myomata there were found cardiac lesions, and this syndrome was called "Myoma heart". But we are unable to see that there is any such close connection between cardiac musculature and uterine myomata. We have seen many cases with pronounced symptoms referable to cardiac insufficiency who also had myomata of uterus, yet our experience would indicate that these very symptoms are nearly always due to concomitant conditions that of themselves tend to increase materially the load of the heart, such as prolonged secondary anaemia following persistent uterine bleeding over a long extent of time, or the venous congestion incident to a large intra-abdominal mass, the additional body weight of a parasitic tumor and the depleted general condition of a goodly number of these patients. We believe that these factors are sufficient to cause the great majority of the cardiac conditions found in myoma cases. Besides in reading up the literature in such cases, autopsies performed in 19 patients dead of pulmonary embolism following various thrombosis after pelvic operations, ten of which were hysterectomies, there were found no cardiac changes to support the view of Strassmann and Lehmann. Moreover, in quite a number of these cases the myomata were as large as one usually finds.

*The vessels involved in thrombosis*—Almost everyone writing on this subject emphasizes the frequency of thrombosis of the veins of

the left leg. In our own experience this fact has been very evident, since fully 66 per cent. of the cases were in the left leg, 22 per cent. in the right and, in 10 per cent. of both legs. We have noticed one other had a case where the vessels involved were in left arm, in another the superficial veins of the neck were involved, and in another in the mesenteric veins. The vessel of the left leg usually involved was the femoral vein, next in frequency was the left saphenous, and least often was the popliteal vein. Of the right leg the femoral vein has been most often involved and the saphenous next.

We noticed that in all of these cases the thrombosis was clinically evident from characteristic signs and symptoms. However, at the autopsy table in patients who had died from pulmonary embolism, thrombosis was found in places rendering the diagnosis the more difficult, as, for example, in the pelvic veins. Our study of the clinical picture of thrombosis has led us to believe that many cases of unexplained post-operative temperature, especially those that occur during the second and the third week of convalescence, are quite likely the result of phlebitis and thrombosis in some of these vein trunks that are so situated that they do not furnish a clean-cut picture and these are generally discovered only on the autopsy table as it were by accident or in the search for the cause of a fatal pulmonary embolus.

We have endeavored to determine, if possible, any factor predisposing to phlebitis or thrombosis,—taking into consideration the pre-operative condition, the kind of operation performed, the indication for drainage, the effect of any previous pregnancy, the age of the patient and the time of the operation. Most generally the preoperative condition of these patients was very satisfactory. Fully two out of every three or two-thirds of them were in first class condition; they were well nourished and had no elevation of temperature. About 14 per cent. were considered in fair condition, about 15 per cent. only were anaemic, having a haemoglobin of less than 63 per cent., and only 7 per cent. were deemed poor surgical risks. A little more than one-fourth of our cases had a temperature of 99 or higher on admission, four-fifths of them were married, one fifth were single, three-fourths of them were parous and about three-tenths of them were nulli-parous, the sterility usually being due to myomata or salpingitis, seventy-five per cent. were 'clean' cases, 21 per cent. were infected from the very beginning, 35 per cent. were drained at operation and 65 per cent. were not drained.

*The clinical picture of thrombosis.*—So well known is the clinical picture of thrombosis

that is scarcely requires or merits much attention.

The first noteworthy consideration in our cases of thrombophlebitis is that practically none of these patients had a perfectly normal convalescence up to the beginning of the clinical signs of thrombosis. The chief characteristic of variance from the normal convalescence was in the temperature curve.

Usually in post-operative convalescence of a clean case one would expect the temperature to become normal and remain normal by the end of the first seven days, or at most during the second week; but this is not the rule in our cases of thrombosis, really, it is very plainly the exception. With almost no exception our cases have had a definite, low, persisting fever from shortly following the operation up to the initiation of pain and swelling of the leg, during a stage when the temperature should really be normal. This temperature runs from 99 F. to 100 F. It usually is not high. The pulse also usually remains low with this low fever, the pulse curve either accompanying or falling below the temperature curve. In these cases of unexplained low elevation of temperature, we believe the possibility of obscure thrombosis and subsequent infarction or embolism should always be kept in mind.

*Signs and symptoms of thrombosis.*—It is very easy to detect the symptoms of peripheral thrombosis. The first symptom the patient usually complains of is pain, and it is usually the first symptom to explain the low fever. In a very few cases tenderness may be present along the course of the femoral vein before the pain is manifested. Sometimes this pain is very acute, requiring morphine, and it is usually rather persistent, in proportion to the severity of the thrombosis. The next prominent symptom is swelling and it may be marked. This swelling is limited to the region supplied by the thrombosed vein. This swelling is limited to the ankle and lower part of the leg in saphenous thrombosis; and in femoral thrombosis it is limited to the leg and thigh; in popliteal thrombosis the swelling is limited to the whole lower leg. It is a common thing to have elevation of the surface temperature. It is rather unusual to have redness over the course of the vein, sometimes the limb becomes cyanotic.

We must bear in mind, however, that thrombosis of a large vein may be present and yet have almost no swelling. Yes, there may actually be thrombosis of a large peripheral vein without any local sign or symptom whatever.

The initial symptom of pain has become evident before there is any decided rise of temperature. Usually there is a very small rise of

temperature before the first 24 hours after the onset of pain. This temperature may or may not precede the swelling. The rate of the pulse is usually not much increased, except in cases having a very high temperature or pulmonary complications.

We observe that the majority of thrombosis occurs during the second and third week of convalescence; the end of the second week is the most common period. About three-fourths of our thrombosis cases become evident in the 72 hours of the 12th, 13th and 14th days of convalescence.

The first symptom to appear is pain and it is the first to disappear.

Whereas, swelling being the last to appear is the last to depart. Thrombosis greatly prolongs the convalescence of patients. Thirty-nine days is the average time of stay in the hospital, which is much longer than the normal time.

Notwithstanding this prolonged convalescence, more than half of our cases had symptoms referable to thrombosis when they were discharged from the hospital. The symptom in most of these cases was swelling of the leg. We have learned that this swelling, in some instances, persists for months.

It pays every surgeon to make a careful review of the hospital records of all cases of prolonged recovery following operations.

*Pulmonary Complications of Femoral Thrombosis.*—Pulmonary complications are the most serious sequences of thrombophlebitis. Fully four of our cases developed infarcts of the lung, and one developed pulmonary embolism. Of these cases there were two deaths, one of lung abscesses resulting from pulmonary infarcts and one from embolism of lung.

As far as fatal results are concerned, post-operative thrombophlebitis of the pelvic vessels seem to be more serious than that of the leg veins. This fact has been observed by other writers. It is almost an axiomatic fact that, of all kinds of post-operative thrombosis, that complicating the femoral and saphenous veins is the most benign, especially when involvement of these veins is accompanied with pain and swelling. It is quite a remarkable fact that death from pulmonary embolism scarcely ever follows this type of thrombosis. In fact one reliable writer has held that thrombosis of the saphenous vein never of itself causes pulmonary emboli. But we cannot accept this statement without reservation.

Pulmonary embolism is a less frequent complication of thrombosis than pulmonary infarction. Infarcts developed in four of our cases of thrombosis. From these facts it is evident that particles of thrombi are broken

off and washed into the general circulation. It is a difficult question to explain why they are rarely large enough to cause death from embolism. This may be due principally to the fact that we have kept our patients who were suffering from thrombosis in bed for a long period of time.

Very simple is the treatment of embolism, mostly because there is very little that one can do. The application of strong counter-irritants was employed twenty-five years ago. Our forebears painted the legs with iodine from Poupart's ligaments to the heel. Next there followed the era of lead and opium liniments and ichthyol. Our methods of treatment in recent years have progressively grown simpler. We have ceased to use local applications, since there is danger of applying them too vigorously. We have found the use of ice bags locally to be very effective. Care must be exercised not to cause ice burns. The return flow of blood and ease and comfort will follow the elevation of the leg. Where the pain is too severe we use sedatives. We do not allow these patients out of bed until the pain has disappeared and the swelling has practically subsided. It should not be necessary to insist that massage is a very dangerous procedure in post-operative pain of the legs until one has discovered the cause of the pain.

*Pulmonary Infarction and Femoral Thrombophlebitis.*—We have observed in our cases that pulmonary infarction and femoral thrombophlebitis are associated quite coincidentally. They are found in the same type of patient, they are found in the same age period, they follow the same group of operations. We observe them in the same period of post-operative convalescence, and it is further noticed that they are preceded by the same low, continuous prodromal temperature. We, furthermore, observe that there is a closer relation even than this between thrombosis and infarction, because we have often found both complications in the same patient. Nearly 50 per cent. of our cases of pulmonary infarction also had venous thrombosis with pain and swelling of the leg. And in the majority of these cases having both conditions, the leg symptoms (or venous thrombosis) appeared before the pulmonary infarctions. In less than half of these cases the infarction appeared first, to be followed in a few days by pain and swelling of the leg. We regard such clinical picture to be strong confirmatory proof in the diagnosis of pulmonary infarction.

*Cause of Death in Pulmonary Infarction.*—Pulmonary infarction per se usually has a course of short duration and our patient recovers. But because it is occasionally associated with grave complications, it may take a more serious



course. Such complications nearly always are due to: (1) Septic emboli, which cause infected infarctions; (2) Mild infarctions within a lung which is already infected; and (3) Second attacks of pulmonary infarction or embolism.

Usually an attack of infarction that occurs within the first week of convalescence is liable to be more serious than one that develops later. Within the first few days following an operation, the general resistance of the patient is low, and a small embolus might develop a condition of shock entirely out of proportion to the size of the embolus. And also for several days following an ether anesthetic, the lungs often are more or less irritated, slightly congested and a mild bronchitis may develop. It is a notable fact, in looking up the reports, that one-half of the patients that died of pulmonary abscess or gangrene, the infarctions supervened definitely before the sixth day following the operation.

*The Treatment of Pulmonary Infarctions*—The treatment of infarction is symptomatic and expectant; symptomatic in that nothing radical can be done for the patient to cure the infarction; expectant in carefully observing the development of our case and endeavoring to ward off further complications.

The symptoms to which we must apply therapeutic attention are pain, dyspnoea, shock, cyanosis, anxiety and restlessness. There is rarely any cyanosis and shock and the cough is usually not severe. Morphine is chiefly indicated to alleviate the pain. We believe it should be given in sufficiently large doses to render the patient as easy as possible. We also may greatly relieve the pain by mechanically lessening pleural movements by strapping the chest with broad straps of adhesive. As a rule dyspnoea is present, usually in proportion to the severity of the pain. If we relieve the pain we lessen the dyspnoea. We may render the respirations easier by the Fowler position. There is usually a real insufficient oxidation of blood when cyanosis accompanies dyspnoea, and this requires active therapy. Oxygen may give instant relief, in this type of case, not only by clearing up the cyanosis, but in slowing down the respiratory rate. This further relieves the patient of exhaustion, gives rest to the heart, reduces the pulse rate and calms the anxiety and restlessness of the patient. For the same reason fresh air is of great value. As to drugs, we have used atropin combined with morphine, especially when there is a productive cough.—strophanthus, strychnin and caffein are also useful agents. But not very often does a case of infarction require such energetic stimulation.

The acute symptoms usually disappear after the first 48 hours, and we pursue a course of

expectancy. After ten to fourteen days if the temperature has fallen to normal we may consider that the greatest danger has passed and the infarct is resolving normally without any complications. But, on the other hand, if pulmonary symptoms persist, and the temperature steadily rises higher and physical signs increase rather than abate, we no doubt have an infected infarct and this is usually a very serious complication.

As a rule, however, the infarction observes its short course, the pulmonary conditions clear away in about a week, the signs may remain 8 or 10 days longer and as they disappear the temperature again becomes normal. After this we gradually allow the patient to sit up in chair, next to walk around and in a day or two he may go home. We must insist on keeping the patient in bed until after the temperature has actually reacted normal. They think this is severe and will chafe under it. However, it is the only safe rule to follow.

*Pulmonary Embolism and Thrombophlebitis.* The connection between thrombophlebitis and pulmonary embolism is not very clear. All who have investigated the facts agree that pulmonary embolism does not often occur in patients who have pain and swelling of the leg. In one clinic having 205 cases of thrombophlebitis there were only three cases of pulmonary embolism. It is not easy to explain why these two conditions are not more often associated than they are. Very little experimental work has been done to explain this situation. Considering it from a clinical basis, it would appear to us that the explanation of this phenomenon perhaps is to be seen in the nature of the thrombophlebitis with which we have to deal. If, as many believe, traumatism and infection be the principal causes of thrombosis, femoral thrombosis along with pain and swelling seems to us to present the characteristics of an inflammatory process. In a typical case of this kind all the cardinal signs of inflammation are present. Along the course of the femoral vessels and in the leg there is pain; we also have swelling present; local tenderness is in most cases noted; the surface temperature is often increased and in the region immediately surrounding the thrombus redness of the skin is present.

It is in understanding the clinical picture that a satisfactory prognosis may be made.

### Discussion

*Dr. W. E. Dicken, Oklahoma City:* In my opinion there is nothing more tragic and heart-rending to a surgeon than fatal embolism following an operation. It is too bad the essayist could not give us a more definite definition of embolism. This is not a condition in my opinion that needs treatment so much as pro-

phylaxis. In order to treat thrombosis and embolism there is little that can be done aside from plenty of rest, allowing nature to do what it can. The Mayo clinic assert that the fatal embolism is always the result of sepsis. We all know that the technique of the Mayo clinic is above reproach and that most all their cases are clean cases. Some have thought that the position of the patient during an operation might have something to do with fatal embolism. It might be that these sudden deaths we have on the table instead of being attributed to ether are chargeable to embolism. I have no authority for that. On the other hand crushing arteries and veins might cause enlarged thrombosis and by continued massage dislodge a certain portion of the thrombus and send it through the circulation. We also may assume the fact the essayist brought out in his paper, that sepsis has a good deal to do with the breaking up of the fibrin of the blood. It might be possible too that our pneumonic conditions, operative procedure of any nature and lung abscess conditions could be caused by small particles of emboli, small enough to enter the smaller circulation and cause the pneumonic condition.

*Dr. Sanger, closing:* I do not know that I have anything further to say. I did want to report several cases that I attended but after I got through writing what I wanted to write I did not want to wear out your patience and I left it off. This paper was a good deal harder to work up than I had any idea it would be or I would not have attempted it. I want to thank you gentlemen for the discussion.

#### THE FREQUENCY OF ACUTE INTES- TINAL OBSTRUCTION FOLLOWING ABDOMINAL OPERATIONS—STRESS- ING THE IMPORTANCE OF EARLY RECOGNITION OF CONDITION \*

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The frequency of post-operative obstruction relatively speaking is comparatively rare, but every surgeon who has access to a great many abdominal cases sees quite a number of these unfortunate occurrences. That practically all cases are preventable, as claimed by some authorities, is rather too broad a statement. Of course, if one could foresee the many things that one later finds producing these obstruc-

tions, there would be no reason to ever expect post-operative trouble. But in spite of due care and diligence, sooner or later you will surely have to deal with an acute intestinal obstruction following laparotomy. And for this reason I have been impelled to present this subject here today in order that some pertinent points might be brought out in the discussion that will be a benefit to us in meeting the exigencies that arise in this class of cases.

In reviewing the works of the standard authors one is struck by the meagerness of discussion with which the subject of post-operative obstruction is dismissed. The uninitiated will at once be mis-led into believing that the condition is so infrequent that the probability of having to deal with such an unfortunate complication is far remote. But practical experience with my own cases and observation of cases during my resident hospital days—cases that were operated upon by some of the most able surgeons—have led me to be always on the look-out for the occurrence of this condition. For it often occurs in some of the most favorable cases, and at times one would least expect, occurring suddenly without any apparent warning, calling for immediate and definite interference. This being one condition above all others where every hour's delay is fraught with dire possibilities of a fatal termination.

It is usually in those cases where the obstruction could be the least expected, that we are liable to err in making an early diagnosis and quickly reopening the abdomen to relieve the ileus.

There are many forms of obstruction that that may follow abdominal section. The most frequent I believe, and the one that taxes our resources to the limit, is the so-called paralytic over-distention of the bowel due to undigested food particles contained therein, to traumatism, pulling on the mesentery etc. at the time of operation, which seems to greatly augment bowel distention. Of course, the frequency of obstruction accompanying suppurative appendicitis is so well recognized we pass over that by merely mentioning it.

It is the more intractable types that I wish to bring to your consideration. Those due to bowel adhesions following extensive denudations of peritoneal surfaces, occurring within three to six days following the operation. Those coming on late, due to volvulus caused by certain parts of the bowel becoming over-distended or segmented paralysis. Those due to a bleeding of the omentum with a later formation of an organized clot that encroaches upon the bowel and binds it, thus producing a constriction, and those due to bands and veils

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that were over-looked at the time of the operation. By recalling cases seen at operations and autopsy one could name various and sundry causes that might be responsible for the obstruction. But suffice a discussion of the condition in general and not from the standpoint of any particular type.

My personal observations have led me to believe that at least 90% of the deaths attributed to "Acute dilatation of the stomach" are certainly secondary to some form of obstruction. This is rather a broad statement to make in view of the prevalent belief that acute dilatation is an entity per se.

But I am sure if one will only look back over the cases he has seen in the past following operations for simple appendicitis, etc., diagnosed as acute dilatation of the stomach and correlate the symptoms of those cases with what we DO KNOW concerning obstruction, he will be convinced that acute dilatation is practically always secondary to some form of obstruction, whether it be paralytic or mechanical.

Ochsner states that where the patient is properly prepared before operation and is kept from all food for the first few days following, administering pre-digested food and normal saline per rectum by the drip method, obstruction practically never occurs.

Far be it from me to question the statements of an authority like Dr. Ochsner, but I believe his statement is not hardly accurate to say the least, and especially when one recalls cases that met with all of his requirements and in spite of this developed obstruction.

Also I believe his advice—"that in a great number of post-operative cases even where complete obstruction exists, the condition will subside if gastric lavage and rectal drip be instituted as soon as obstruction makes its appearance"—is somewhat dangerous, as we all know that the sooner the abdomen is opened and obstruction relieved, the better chance the patient has of recovering. In those cases of obstruction due to paresis of the intestinal wall, Ochsner's method is the proper treatment and if closely followed the paresis usually passes away relieving the obstruction. But in cases of volvulus accompanied by adhesions or constriction due to organized blood clots, etc., it is obvious that surgical interference must be resorted to.

A hurried or imperfect preparation of the patient is often responsible for post-operative obstruction. Rough handling of viscera, undue pulling of the mesentery, and oozing from operative field are all frequent causes of obstructions.

Another little mentioned cause, is the con-  
tusing of the omentum which causes this highly

vascular organ to become agglutinated forming loops and bands thru which the intestines slip, later becoming strangulated.

In this latter connection I wish to call your attention to a case that I operated on some eighteen months ago. At 11 o'clock at night I was called by a colleague to a place eighteen miles away to see a man who was suffering from an inguinal hernia which he was unable to reduce. When I arrived about mid-night the patient was up walking about the house waiting for me, stating that he himself had reduced the hernia after the Doctor left and was now feeling all right, but had made up his mind to accompany me back to the hospital and have a herniotomy performed as it had often bothered him. He accompanied me back to the hospital, took a tub-bath, a dose of oil and went to bed. We operated on him the next day finding a very large sac containing a small amount of omentum. The hernial wound was repaired in the usual way, the patient complaining very little following the operation. On the morning of the 4th day he began to complain of dull abdominal pain, later followed by some gaseous distention. But in view of the fact that he had had two or three normal bowel movements since operation his symptoms were not considered serious. An S. S. enema was ordered and it was expected that conditions would be relieved but in a few hours patient showed marked symptoms of collapse, began vomiting and in a remarkably short time was spitting up duodenal secretion that is so characteristic of this condition. His abdomen was hurriedly opened by a left rectus, a loop of ileum was found completely strangulated within a mass of omental adhesions. Due to the ecchymotic condition of the bowel and omentum it was impossible to ascertain which afforded the abraided surfaces for the adhesions—or is it not possible that loop of bowel and accompanying omentum both suffered at the hands of the patient in his efforts at reduction. This patient died twelve hours later, succumbing, I believe, to the effects of the toxic duodenal secretion.

The moral afforded by this case is that a patient may traumatize the herniated mass by his own manipulations. And secondly when you operate upon a case that gives a history of forcible reduction it is a wise idea to open the abdomen and explore condition of intestinal coils and omentum before leaving the herniotomy table.

This case has only been mentioned because I believe it is rather rare and because of the lesson it teaches.

In conclusion I wish to state that we should never be in a hurry to rush a patient on the table unless an emergency—due care being



taken in the preparation, abstinence from food, other than liquids, for at least 24 hours previous, an efficient dose of oil the evening before and practically nothing but hot water by mouth the first forty-eight or seventy-two hours following the operation, depending of course on the severity of the case. At any time an abdominal case should complain of acute abdominal distress, regardless of the number of days elapsing (I recall one of my own cases in which obstruction occurred on the 14th post-operative day) obstruction should be suspected unless the pain can be definitely accounted for. When everything else is ruled out, open abdomen without delay.

If this is done before patient begins vomiting the characteristic duodenal secretion, his chances for recovery are good. If this vomiting has begun previously, he is very apt to succumb.

#### Discussion.

*Dr. M. Smith, Oklahoma City:* Unfortunately I did not hear all the paper, consequently I am not able to make a real intelligent discussion; but from what I gathered from it, especially in regard to hernia, I think experience is a dear school and I am led to believe from the context of this paper that there have been certain points in hernia that we frequently overlook. I mean that when a man has a strangulated hernia you are not satisfied, even though it may have been reduced by the patient himself, you are not sure what caused him to have the strangulation in the first place. This is the premises upon which I based my operations for the last twenty years, that when a man has a strangulated hernia I want to know the condition of the bowels because in numbers of instances I could mention, have I seen hernia reduced when the bowels are gangrenous. I have seen a number of those cases and I must say I have been led astray just as much as many of you have been who do this general surgery, and you cannot tell for the life of you whether this restriction has been relieved or not. When the least little capillary is disturbed, that portion of the bowel is enervated and dies and I feel that no man who is doing surgery should feel that his patient has been relieved from the simple fact that he has been able to reduce that mass, which often happens. I would feel very much better to do a herniotomy on him after examining the condition that causes the hernia. I believe it is beyond contradiction that when hernia exists any time during life it began during early life. When you get a traumatic hernia you get a condition that is so inevitable you cannot mistake it. I think those cases are few and far between.

In whatever form of hernia it may be I think the surgeon's duty is to put it up to the pa-

tient that such a condition exists and he should be operated on at once, and then I think the conditions should be thoroughly explored and see the physical condition of that bowel. I think it should be looked into very carefully. As I stated in the premises, I have had occasion to see a number of those cases where the patient had been relieved, with a gangrenous bowel, and I think any man is negligent of his duty that does not see to the condition of the bowels. Take the case under more serious conditions and I feel that any surgeon that reduces a constricted hernia is committing a serious error. I think that they should be looked into thoroughly, because we can frequently reduce hernia that is constricted and give relief for a short time. This subject as I understood it was probably an acute obstruction following operation.

There has been a great deal said about the acute dilation of the stomach. I think there is a cause for this. I do not think we know exactly today. No man who does a hernia operation, no man who reduces a hernia, has the right to offer that patient anything in the world unless he opens that sac and sees just what the condition is. Another thing, in acute dilation of the stomach, I do not know what causes it any more than you do. Anyway, any man who does a hernia operation should see whether the circulation is all right and then if they have a plugging up of the blood vessels and so on. The amount of circulation cut off gives a certain amount of dead bowel.

*Dr. J. S. Hartford, Oklahoma City:* The essayist brought out two points, one traumatism of the momentum and traumatism of the intestines. We have two-thirds as many cases in women as in men. If we have the signs of the stomach and intestines and there is the impression of loops of the intestines upon the anterior abdominal walls, it is true there is a certain degree of obstruction. I believe that in this type of cases is the place where conservatism must be used because this patient has already undergone an abdominal operation. The patient is not anxious to be operated on again, neither is the surgeon anxious to operate again, and for that reason sometimes these cases are delayed. I think a small incision in the stomach and inserting a catheter is a good practice.

*Dr. McLain Rogers, Clinton:* The question in a man's mind, which means much in saving life and his reputation, is when to interfere. Whether or not to operate on the abdomen to untangle the bowel. Therefore, it is a question of judgment as to when to open.

Another thing is when your patient gets an obstruction, if a man is on the alert he is able to see if there are toxic symptoms; by examination of the patient's blood you can tell

*Dr. LeRoy Long*, Oklahoma City: I think the best time to treat intestinal obstruction is before we have it. My opinion has been based on bitter experience for a number of years. I reported a case in about 1910 and I was rather proud of that report, but then I began to look over the situation to see what I had done. I feel like the reason I had a case of obstruction before that was because I had not taken in the fundamental facts. One thing is that we should not insult the intestinal tract. For a number of years I have rarely given a cathartic before an operation. The patient has a light supper and no breakfast and never a cathartic afterwards because it brings trouble. There is no question in my mind about this. I have only one case in the last few years and that was when a physician requested that I give a little cathartic. I do not believe a cathartic should be given. Sometimes I think it will get to be somewhat of a stale question but once in awhile I see men who are doing a great deal of surgery and you find where they give pills and cathartics after the operation. If you have operated these cases you will remember how thin the walls are and you can just see how paralyzed the whole system is. Then we try to make pressure to push it out. The operation in those cases in which we do have obstruction, and I have had occasion to operate on a number in the last few years, and no doubt you can help some of them by taking up the first loop, but in my own work I much prefer to go on the right side and make a small puncture. We must not handle things and traumatize things at that time. We must be careful. In the majority of those cases if they are operated on any time at a safe period the obstruction disappears and the patient gets up.

*Dr. A. S. Risser*, Blackwell: In my experience practically every case of obstruction has been that following operation and my plea here is that we diagnose our cases of appendicitis. I have had in the last four or five days a number of drainage cases of appendicitis, and those are the cases that give us trouble. Let's make our diagnosis early and then we will have clean cases. Those that show infection in operations are because of delayed operations. In drainage cases I make no effort to move the bowels and they move about the sixth day by themselves.

*Dr. M. Smith*, Oklahoma City: If I had known I had been dealing with acute abdominal obstructions probably my talk would have been a little different. Now, Mr Chairman, I do not suppose there is a man in this building with obstruction of the bowels, with symptoms definite on that condition, who would give a purgative. Take in the physiology of that condition and anybody that would give a purgative under that condition is straying from

the fields where he has been taught. I do say beyond any contradiction that the more we handle the intestines the more certain it is that obstruction will follow. I could not help but get up and put myself in the right because I did not know this paper was on acute obstruction of the bowels but if an obstruction exists from a hernia it is the same as if it exists from something else. In regard to the drainage of the bowels. How many cases are you going to get. Just the same as the others, it does not matter what you give, Mr. President, but it is the condition under which you give it.

*Dr. Frank McGregor*, Closing: I do not believe I have anything to add except to thank these gentlemen for the discussion. There were several nice points brought out and I feel well paid for my efforts. I do not think you will ever get surgeons to agree on giving purgatives. I do not think purgatives should be given very early following an abdominal operation. I thank you for the discussion.

## GASTRIC AND DUODENAL ULCER

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Gastric or Duodenal ulcer is a solution of the continuity of the tissue of mucous membrane, with a marked tendency to penetrate to the deeper structures and even to perforation.

They are usually single and round; vary in size from that of a small pea to an extreme dimension, even covering one third of the whole wall of the stomach; however the very large ulcers are usually of irregular outline and are usually caused by coalescing of the multiple ulcers; they are happily extremely rare, we more frequently have the small round multiple gastric ulcer without the coalescing. The duodenal ulcer is almost always single and small, and when it has existed for a long period of time gives rise to much obstruction from the formation of scar tissue which contracts upon the lumen.

The small gastric ulcer is usually to be found on the posterior wall and near to and often straddling the lesser curvature; also they are more frequently found near the pyloric end of the stomach. Medical statistics show that ulcer of the stomach is more frequent than ulcer of duodenum, while surgical statistics show that duodenal ulcer predominates those of the stomach. This divergence can be explained by the fact that stomach ulcer is a little more amenable to treatment; also that the duodenal ulcer so frequently brings about obstruction and is much more prone to require surgical interference; consequently the surgeon sees largely more of this type.

Peptic ulcer, both gastric and duodenal, are largely more frequent than is generally be-

lieved, when we take the trouble to clearly elicit the history and cautiously read the symptoms. As to the cause it is a well recognized fact that chronic infections about the body, particularly about the teeth and tonsils predispose an individual by devitalizing the health and lowering resistance and may feed infection to a devitalized spot of the stomach or duodenum through the blood or lymph channels or may be swallowed along with the food, and resist the gastric ferment and gain lodgment at some favorable spot, etc.

Diminished resistance to a localized spot from improper nourishment due to faulty blood supply which may come from a small embolism, or hardening of local vessels, and this poor blood supply may have much to do in preventing an early healing.

Irregular eating, by frequently over-crowding the stomach at times and passing undigested residue through the smaller end of the stomach and pylorus and duodenum, which food is frequently in a bad state of fermentation, and at subsequent meal times either no food or else an insufficient amount to utilize the acid gastric juices, leaving them to prey upon the walls which have been over-burdened and subjected to the irritations, fermentative processes, infection, etc. Improper mastication of coarse and rough foods which may even bring about abrasions.

Aside from bacterial they may be due to metabolic toxæmia, especially from disordered and congested portal circulation, resulting from chronic intestinal stasis and putrefaction, Gundermann has experimentally produced such ulcers by ligation the left hepatic branch of the portal vein.

Hyperacidity may be a cause, though we often have an ulcer with a subacidity, but in a far majority of cases we have hyperacidity which surely hinders the healing process, and it is possible that the hyperacidity was brought about by the stimulus of the ulcer or by the stimulus of the same agent which caused the ulcer.

Ulcer is frequently associated with, and in fact may be brought about by chronic appendicitis, and diseased gall bladder by the disturbance of motility as well as the toxic influence and the disturbance of metabolism which they produce.

Acute ulcers may be looked for in young adults and up to middle age, chronic ulcer, middle age and pre-advanced, but one may have either at any age, though rarely in the extreme old age and relatively more frequent in infants. I have seen them in the new-born. In these cases they are usually the multiple gastric ulcer.

As to symptoms they vary somewhat in dif-

ferent individuals, and in character, severity, etc., and so often it requires skill and patience to get a good readable history, but in most cases we have epigastric pain after meals; more marked after a large meal of course. Food, also hunger may excite some burning like pain which may be relieved by taking a small or moderate amount of soda or diet.

Eruetation of gas and sometimes food, at times vomiting of food, mucus, or blood, which after mixing with the gastric juices is black; black tarry stools results from hemorrhage from duodenum, pyloric and prepyloric ulcer where the blood escapes being vomited. There is always more or less epigastric tenderness on pressure; and usually just above and to the left of the umbilicus, we find a point of tenderness both on superficial and deep pressure in stomach ulcer and above to the right the same symptoms in duodenal ulcer; but here we have to be very careful to differentiate from gall bladder disease.

There is usually a loss of weight, associated more or less with weakness, and the individual becomes more nervous; in fact many times to the point of neurosis. Occasionally the first warning is a frightful hemorrhage, or an acute and an extremely severe epigastric pain from perforation, which is usually associated with severe shock and peritonitis rapidly develops; or if by chance adhesions may anastomose it to the colon, spleen, or liver, we may escape the immediate peritonitis, and set up an abscess in the latter organs, etc.

Ulcers may rapidly heal without particular symptoms and without treatment, or may last from a few weeks to several years, but as a matter of fact the earlier they are recognized and treated the more rapidly they will heal; and old ulcer with indurated edges is much more resistant to treatment, and the more superficial ulcers with good blood supply and soft edges heal readily under treatment. Complications are hemorrhage, perforation, and in case of pyloric or duodenal ulcer obstruction, perforation gives rise to peritonitis or in case of adhesions as previously mentioned, abscess of other organs, etc., and probably one of the most frequent complications is carcinoma.

As to treatment it is highly important to hunt out and remove every possible source of infection, and particularly does this apply to the mouth, and to the throat, as well as the nasal fossae and accessory sinuses. In clearing up a diagnosis of the sinuses and teeth, the X-ray will serve you well (and I might say in passing that X-ray is quite essential and dependable in diagnosing peptic ulcer, but would be too lengthy to bring into discussion in this paper). The mouth should be kept scrupulously clean, brushing the teeth three times a day;



and should there be any pyorrhoeae, have the dentist clean them up, then keep toughening the gums and abscess pockets with iodine or equal parts of iodine and aconite, taking care to go well to the bottom of all abscessed cavities, and the throat should be kept clean with gargles. All metabolic disturbances should be corrected so far as possible and these are usually to be found in the matter of intestinal stasis, and putrefaction, and can be cared for by the intake of more fluids; and as we usually have hyperacidity, we can make milk of magnesia serve a double purpose here by using as an anti-acid as well as receive its laxative effects, and occasionally in stubborn cases have the patient take a large draught of mineral oil or Cheesbrough's yellow vaseline, a tablespoonful dose on going to bed at night. It is my custom to have them take milk of magnesia or soda when an anti-acid is needed and teach them to alternate from one to another just as the laxative qualities or the magnesia are needed, soda when no laxative is required. Rest in bed for a few weeks is extremely beneficial, using hot applications over epigastrium and should always be strongly advised and in the very acute cases, or cases complicated with hemorrhages should be made imperative; though in the hemorrhage cases use ice bags instead of heat for a few days when you may change to the hot water bottle, but for the majority of cases it is very impracticable if not almost impossible for the patient to go to bed and in such cases by making the work as light as possible and insisting on regular rest and if possible a two or four hour rest period during the afternoon; it is usually possible to bring about rapid improvement and effect a cure although it will require a longer period. The body should have regular baths, alcohol rubs, keeping the skin as clean as possible.

In the matter of medicine, there are three drugs which serve a definite purpose for certain cases. For spasmodic stomachs and pyloro spasm, belladonna or its alkaloid atropine; for very chronic cases, nitrate of silver to stimulate granulations and improve circulation and possibly thereby promote absorption of the indurated margins. Bismuth subgallate in the more recent cases, for its coating effect, and it is even well to use it alternately with your silver nitrate in your chronic cases. In complicated cases, such as hemorrhage, etc., when you cannot feed by the stomach, nutrient enemas may be used for supportive measures for a few days.

By far the most important thing in treatment is the diet and the use of one's alkalines (soda and milk of magnesia). In hyperacidity cases, keeping the stomach contents at all times neutral or alkaline by giving one or the other of these agents every four hours through the day

or oftener if needed up until bed time, after which time I find ordinarily there is such little secretion on the average stomach that it usually does not require anything more of an alkaline nature until morning.

My plan of feeding is very simple; to the average adult, two whole eggs whipped into one glass of milk for the early morning meal; middle of forenoon, one egg in one glass of milk; noon meal, two eggs in one glass of milk; middle of afternoon one egg in one glass of milk; for P. M. meal, two eggs in milk, and at nine or ten P. M. before retiring, milk with or without egg as desired by the patient, and in fact if the eggs become obnoxious they can use only one at any time in place of two and also increase the quantity of milk if so desired. On this diet I find that the average individual can do moderate work if necessary to work, and improve in symptoms and usually gain in weight and strength, and rapidly get away from pain and toxicity. I believe it better to keep this same diet and alkaline treatment up for at least two or three weeks after all symptoms are controlled and longer in the very chronic cases and then only gradually and slowly break away from it, by very gradually decreasing the amounts of the alkalines and milk and eggs and filling in with a very small amount of scraped, broiled beef; rice which has been stewed into a mush, with butter and cream; strained oatmeal, gruel with same, boiled custard and soft puddings, such as tapiocas, but no bread or hard foods for several months, watching them all the while of course with the idea of going back to the milk and eggs at the first sign of a return of trouble.

The watching and following up treatment should be carried out for months; in some cases a year or more or else maybe an ulcer, which is well on the way to a permanent cure, will have to revert back to surgery; during this period no coarse or rough foods should be swallowed, no husks from cereals, or the tough connective tissue of meats, only certain of the soft forms or raw fruits, cooked fruits being preferable. Very hot or very cold foods or drinks should be avoided, and five or six small meals a day for a long period of time are better than three large meals.

In spite of treatment, there will be a few old ulcers with such endurated margins, whose walls will not collapse, or from a lack of proper local circulation most probably, which will resist all treatment, and in all cases where the symptoms persist in spite of treatment it is particularly advisable to have an X-ray diagnosis, which will usually differentiate between ulcer and carcinoma, as well as give one location, size and a pretty good idea of the amount of induration from the nature of incisurae con-

tractions, and hour glass contractions if present.

Cicatricial contraction, pyloric, and duodenal contractions as well as perforation, require surgical interference; hypersecretion may be due to the above cause, or it may be due to pylorospasm, or to inflammatory oedema, in which case it can be controlled by emptying the stomach and giving it a rest and the use of belladonna. For pain; rest in bed, the alkalines, belladonna, etc., external applications of heat and cold. For vomiting; rest to the stomach and temporarily bowel feeding, cerium oxalate, bismuth subgallate, either alone or combined, and sometimes a drop of carboic acid mixed well with the powder or else stirred in with a draught of water to rinse the powder down, and in extreme cases one or two doses of cocaine. For hemorrhage; hypodermic of morphine, extreme quiet and rest for the stomach for several days during the stage of hemorrhage, adrenalin chloride, 10 M- of 1-1000 sol. in a little water every few minutes until controlled; ice bags over the stomach; though alarming they seldom prove fatal, the blood will be vomited, and occult blood can be found in the stools. The patient in extreme cases may require transfusion and the anemia from the hemorrhage will often increase the risk for operation.

There is one thing the practitioner should remember in case of perforation, early and very early operation has a very low mortality; after ten hours operation is not early; after twenty-four hours it is late, and the gravity increases steadily from time of perforation until operated, and during this time hypodermics of morphine to give rest, relieve pain, and support the patient, and nothing whatever allowed in the stomach. *Turn them over to the surgeon as early as possible.*

Prompt surgical interference and X-ray treatment is essential in the carcinomata degeneration.

### Discussion.

*Dr. A. G. Cowles, Ardmore:* The multiplicity of theories suggests that either there are many factors concerned or the true factors have not been discovered.

Etiology (1) Rosenau's specific action of Bacteria—Infection of mucous membrane thru blood stream by specific or non-specific Bacteria from a focal infection is the primary factor and also the source of reinfections.

(2). The corrosive action of Gastric Juice on mucosa cells that have their normal resistance against (acid peptic) digestion diminished in some way.

(3). A localized trophic disturbance is responsible for the chronicity of the ulcer with resulting (scar tissue defect)

The normal blood supply of the Pyloric region, lesser curvatin and first portion of the duodenum is comparatively less than the rest of the stomach. More ulcers are found in the laboring class (nonptotics) who eat large meals followed by immediate exertion. The duodenum being firmly fixed to the posterior abdominal wall, resulting in greater traction, when the pylorus descends after filling.

*Dr. Benj. H. Brown, Muskogee:* I have an impression that ulcers of the stomach and duodenum are too lightly diagnosed by the profession. I wish to give an illustration as to the pitfalls that beset the feet of the unwary.

This week I saw a patient who complained of heartburn extending over a period of fifteen years. Within the last year he had begun to have epigastric pain, coming on periodically, extending through to the back and relieved by eating. The pain was at a maximum at noon and was relieved by the noon meal, and again at a maximum at six and relieved by the evening meal. There was a definite area of epigastric tenderness, and my tentative diagnosis confirmed that which had been previously made, namely, ulcer of the stomach. In further investigation a gastric analysis was made which was negative with the exception of a free hydrochloric of 60 and a total acidity of 80. The X-ray showed no retention and no filling defect, but also that the stomach was posed three or four inches below the normal, and that both the stomach and duodenum were clear away from the tender area.

*Dr. Lamb, Closing:* I would emphasize in my paper, that peptic ulcer is more frequent than we, as general practitioners believe, and that very many of the cases of "Indigestion" and such like, that we are prone to consider lightly and give practically no treatment, and no chance whatever for a cure unless such cure comes spontaneously, are peptic ulcer, and should have careful consideration in order that they may have a chance for a cure before some of the fatal complications set in.

As to the X-ray findings, they are of much importance in clearing up a diagnosis and often show a disturbance of gastric motility from adhesions of the pylorus following previous gall bladder disease etc., but will usually clear up a diagnosis.

I have seen three cases in the new-born die after having vomited blood and the black vomit for a few days. One of these cases was posted and throughout the pyloric end of the stomach was found hemorrhagic spots and very numerous abrasions of the mucous membrane; this case began vomiting when the baby was about four days old and vomited until dead; the other two cases were not posted but they both had the black vomit, one case was a very weak

baby, the mother had suffered unusually severely from toxic pregnancy.

## EARLY RECOGNITION OF GASTRIC CARCINOMA

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The great difficulty arising in the diagnosis of gastric cancer especially in the early stages, in spite of our ever improving methods of investigation, and the fact that 14,000 of our 40,000 deaths annually from cancer are those of the stomach, furnish sufficient incentive to strive after new methods or the further perfection of the old in order that our abilities along this line may be improved.

There are many ways in which the understanding of a problem in almost any domain of science may be obscured. The knowledge involved may be so recondite—the logical interpretation so subtle, that few are competent to master them. We are prone to fix our attention on a single mutable, overlooking some equally important factors that determine the thing we are attempting to interpret. It may be that this tendency has done much to make the cancer problem so difficult.

The work produced during the past twenty years has taught us the protein aspect and the very broad view that we must take of the subject from whatever angle we approach it. It is not long since the upholders of the non-parasitic theory were at odds; yet evidence has been produced to show that either, or both may be correct.

The etiology is far from being solved; nothing definite and constant has yet been shown, which may account for the strong tendency of some to fix, or attempt to fix, such a close relationship between cancer and other recognized diseases and conditions. It is apparent that the thing to a great extent is a question of history in an individual case. Accurate diagnosis of gastric ulcer has only been made within the past few years; hence, a history of an ulcer dating back a considerable time is not to be wholly relied upon in compiling definite data.

These facts may help us to understand why statistics of different men vary so much in respect to e. g. on gastric ulcer and gastric cancer, because some men take up the question of cancer in its development from that of ulcer; while others start in their investigation from almost the opposite angle. The difference of opinion as to the ulcer being a causative factor in the production of gastric cancer is a question of the manner and definiteness of eliciting the history from the patient; also of the ideas of the historian as to what constitutes ulcer symptomatology. Hence we are still forced to seek a

"happy medium" or stay well within the law of averages for practical knowledge.

Attention was first called to this peculiar relationship by Rodman in 1904; at that time the diagnosis of gastric ulcer was not an active thing—it was just at the beginning of the period when definite work was being done, but before any real knowledge had been obtained. It was at this time that the Mayos first announced any of the results of their excellent work on the *living* pathology—those results were almost contrary to those obtained by the European men, after ten years of work along the same lines on *dead-house* pathology. Further, this same thing may be said of the diagnosis of cancer e. g. Cabot has shown that only 73% of all positive diagnosis of gastric cancer was proven at autopsy, and that cancer is more commonly complicated with fibromatosis than with ulcer.

Wilson, from his very careful observations in 684 cases, shows a close relationship (71%) between cancer and ulcer; but adds "this question is unanswerable at the present time, with our present methods of investigation, because (1) no one has ever seen a chronic gastric ulcer in process of development. (2) No one has been able to witness the stages of reaction to irritation through which the tissues of the stomach wall passes during the formation of ulcer or cancer; (3) No one has ever recognized cancer in the process of development anywhere in man or animals; (4) Even the most skilled pathologist cannot point out the line of demarcation between simple hyperplastic cells of a chronic ulcer and those associated with cancer; (5) no one has experimentally produced a cancer."

McCarthy, from a careful study of 280 calloused gastric ulcers in which there was no clinical or gross surgical hint of malignancy found, in 63% atypical cells in the hyperplastic edges—this is suggestive etiologically, but, as McCarthy frankly admits, it carries no proof that those ulcers showing this arrangement and structure were ever anything but carcinoma. Smithies believes there has been much misunderstanding on this point. The publication of reports claiming that the clinical type of dyspepsia, which frequently precedes what is commonly recognized as a malignant form of gastric disease, is often not to be differentiated from that of chronic ulcer, and has given rise to a widespread impression that vice versa, a like number of chronic ulcers terminate as cancers. This study of the early history of 921 proven cases of cancer indicated that more than 65% had a long dyspeptic course, preceding the clinical evidence of malignancy. But this does not establish the fact that a like proportion of benign ulcers eventually terminate in cancer.



Other men, with varying opportunities following various lines of investigation, have published reports and statistics with many variations. From Jenger, who stated in 1882 that "all cases of gastric cancer originated in gastric ulcer" to the present day men, as e. g. Mayo with 54%; Hartman and Sapashka, each with 10%; Moynihan, with 72%; Smithies with 41.8%. This emphasizes in our minds that whatever the relationship between ulcer and cancer may be, it has not been definitely determined; that the view point, the method, and the facilities all play an important part in determining the results. We must look further than benign conditions in the stomach for a cause of gastric carcinoma. Abelman & Beck concluded that carcinoma is an infectious disease. Caylord, after exhaustive studies under conditions most favorable, rather favored the idea of contagion as one, at least, of the methods of propagation of all cancers; on the other hand, Maude Shye of Chicago some time since demonstrated that the mouse cancer, which is the same or at least analogous to the human type, is not an infection in its behavior and is not contagious. She says, "The most careful and long continued experiments have failed to show the transmission of cancer by contact in the same cage or in adjoining cages." She says further, "The clinical behavior of cancer in this laboratory is opposed to the theory of infection," also the results of her experiments thru several generations show cancer to be hereditary in the strict sense. The infections common among her mice are no more liable to occur in one family than another if the individuals are separated. Whereas, cancer crops out no matter where the mice are kept. Cancer can be bred into and out of strains at will. It can be bred out of a line, one side of which originally carried 100% of cancer. Cancer is not transmitted as such but rather as a tendency to occur in certain families from a given provocation, probably in the form of over-irritation. Leo Loeb in a recent review points out that many factors may enter as causes of cancer without direct reference to any further theory. He states that "All the factors which in various ways either by chemical or physical means increase the proliferative energy of cells may act as causes of cancer." "In order to lead to the formation of cancer in many cases several of such factors must co-operate. Some of these factors are hereditarily transmitted in a certain graded quantity from generation to generation while the other factors are variable and extraneous. All of these factors have one characteristic in common. They all increase the growth energy of normal tissues either directly or indirectly, the latter by sensitizing the tissues to the action of growth stimulus." Hence the ultimate source may be hereditary,

bacterial, mechanical, chemical or any or all of them, which may explain why gastric ulcer gives such high percentage as a causative factor in cancer in one line of cases, and such a low percentage in another line. Until we have reason to change our present vague idea of causation to a more definite one, and one that is unquestionably accurate, and which will open the way to a plain, definite diagnostic method for the determination of the presence of neoplasm very early in the process, we are most concerned with the accuracy and the practicability of any and all of the known methods. These methods or tests have been developed more or less empirically. Men recognizing and accepting the various methods as to end results have varied in their conclusions as to the relative value of given tests. These differences may be accounted for by the make-up of the individual, surrounding circumstances and the opportunities, e. g. Bloodgood lays more stress upon the clinical evidence; Smithies on the physiologic tests and microscopic examinations; Case and the Mayos upon the X-ray (at least relatively); while Sippy and Billings depend more upon a system combining both the clinic and laboratory method. They, with Smithies have not attained the same degree of confidence in the X-ray as have some others. They all, however, make use of all of the methods at hand—some seemingly obtaining greater accuracy with one and some with another. The Mayos who lay considerable stress on the value of the X-ray sometime since announced the making of a positive accurate diagnosis of carcinoma of the stomach in 97% of cases proven on the operating table. Sippy and Smithies both claim to have determined positively in numbers of cases the presence of cancer without the assistance of the X-ray, and which were not found on X-ray examination.

Case, on the other hand, says, "All cases at Battle Creek, subject to laparotomy, are X-rayed. Not a single case of gastric cancer has been revealed at operation that has not been diagnosed by X-ray."

It is very evident from such conflicting reports that one must not be unduly influenced by any one method to the exclusion of the others, but one must make honest use of them all. To do this requires the closest "teamwork" on the part of the patient, physician, laboratory expert, surgeon and pathologist. This, of course, necessitates explaining to the layman the limits of our diagnostic ability, and the great advantage of exploratory laparotomy in order first, to give the patient every benefit; second, to give us definite data as to the value of the diagnostic method.

All agree that the history in a given case comes first; but when we consider the varying

histories preceding or accompanying the development of a gastric cancer, we are prone to wonder if it is not more a chronological position than one of import. If we are to accept Maud Shye's conclusions, a definite family history showing cancer in one or more lines of the family should have some weight. Its absence, however, is of little value. Mayo says there is no evidence to justify the idea of heredity. Again we find (averaging the experiences of Smithies and Wilson) gastric cancer appears in types commonly recognized as peptic ulcer in 47.3% of cases, and with a family history in 9.2%. It appears in those who have had previously perfect gastric health (the type known as gastric athletes in 31.9% of cases). It appears in those giving a prolonged indefinite gastric history in 9.12% of cases.

According to the pathology as worked out by McCarty, 1st, Acini are found consisting of two rows of cells—an outer and inner row—this he calls "primary hyperplasia"—this condition is never a cancer. 2nd, Acini, as above, appears in which the inner row has disappeared. There is a proliferation of the outer row of cells (Secondary hyperplasia). This may or may not be carcinoma. 3rd, Acini are found in which the inner row of cells has disappeared—the cells of the outer row are hyperplastic, the line of demarcation between the acini and the atroma is confused, and often partially destroyed. The cells of the outer row are seen in the stroma; also the cells within the acini are often morphologically indistinguishable from the epithelial cells in the stroma. This is termed "tertiary," or "migratory" epithelial hyperplasia. This is always carcinoma.

As the pathological examination of the stomach is of course out of the question, in attempting an early diagnosis without laparotomy, we have left the symptomatology, physical examination, X-ray and physiological tests. Rather than lay undue stress on any one method, it seems to us that they must all be combined, especially the symptomatology and the physical and laboratory examinations.

It is characteristic of stomach diseases that definite subjective signs are evidenced in a more classical way than in most diseases elsewhere in the body—probably due to the fact that even before marked pathological changes occur, the physiologic functions are perverted in a given disease. Hence we have a right to expect more in the way of symptomatology in beginning cancer of the stomach than in cancer elsewhere in the body. And for this same reason the physiologic tests and the symptoms should be considered together; e. g. according to R. Schmidt, Sippy, Bainbridge, and others, pain is one of the early symptoms of cancer, as it is in nearly all organic diseases of the stom-

ach. This pain cannot be explained away on physiological grounds as can most other gastric pain. It occurs in a definite way and at a definite time, and can be determined as cancer pain usually by exclusion. If the pain in time, character and location is difficult to differentiate from the so-called ulcer pain, either determine that no free h. c. l. is present in the stomach, or if present a complete neutralization of the free h. c. l. will correct the ulcer pain.

Again, as to the question of motility, retention occurs in more than 72% of gastric cancers, according to Lon Eisberg; and 90% of gastric ulcer cases. Now applying the well-known rule of hyper-motility in achlorhydria cases; by neutralizing the free h. c. l., in case of ulcer, the retention disappears while it is not affected in carcinoma. This presupposes, of course, the ruling out of tumor, adhesions, etc., that might mechanically interfere.

As to the changes in the normal secretion of the stomach, Eisberg found h. c. l. absent in 54% of cases and in abnormal amounts in nearly all of the 46% remaining, the total acidity was low in every case, while the combined acid was high. He calls attention to quite a striking fact; no acidity in early cases; acidity present in advanced cases—i. e. acidity indicates a non-operable case. Lactic acid is a constant finding in percentage varying from 42% to 75%, but is never found in stomachs showing free h. c. l. above 10%.

Many tests of various kinds have been advised—some have been discarded as misleading—others have proven, or are proving to be of considerable value; while still others are too new to be passed upon. The benzidine and guaiac test is positive in probably 72% of tests; the Wolff-Junghans soluble albumen test is attracting considerable attention, but evidently has not been standardized from the fact that investigators report positive results in all the way from 30% to 90%. Evidently a special value will be in differentiating cancer from simple achylia and pernicious anemia. The sero diagnosis test recently devised by Emil Aberhalden on the presence of protective ferments in animal blood consists in testing the capacity of the blood serum of the protective person to digest a given quantity of cancer protein. A strong action indicates malignancy—a weak action the reverse. This test probably needs greater standardization. C. B. Ball, however, reports 51 cases, 31 positive and 20 negative, all of which were verified by post-operative pathological findings.

Freund as early as 1885 pointed out the fact that a high blood sugar content is usually observed in carcinoma patients and suggested that blood sugar observations be made as an aid in differentiation between carcinoma and

sarcoma, the latter not giving a positive sugar increase in the blood. Following this others, viz: Trinkler, Jacobson, Hopkins and Herman and Hirschman reported similar results. The most important observations on the relation between cancer and normal individuals as to the blood sugar curve were first made by Rhodenburg, Bernhard, and Koelibel as reported last year in which they showed the normal rise and length of the curve both in the normal and cancer patients, and demonstrating rather a fixed relationship, and the curve peculiar to cancer is constant for all cases.

Friedenwald and Grove during the past year have carried the work further, having in mind its early application to gastro intestinal cancer. They found that in cancer cases after ingestion of 100 grs. of glucose there is a rise of the sugar content to 22 or 23% within 45 minutes, the quantity remaining stationary for two hours or more, while, in non-cancerous cases, the rise is not so marked in the first 45 minutes and in all cases begins a decline immediately, making this an important adjunct to the factors in diagnosis. They say "we have had no opportunity to observe early cases of cancer of the gastro intestinal tract, according to this test, except in a single instance but we are under the impression that the test is quite as definite in early as in late cases. It is quite important to note that diabetes, tuberculosis and thyroid conditions be excluded before the test is undertaken." However, Benedict and Lewis assert "That hyperglycemia increases as the disease progresses, probably a result of a constant demand of a growing tumor for carbohydrates." Reasoning backward if this be true the younger the growth the less the hyperglycemia.

Loeper, Thinji and Tonnet have recently reported their results in blood studies of fifteen cancer patients. They found that cancer affects the nitrogen equilibrium of the organism, especially that of the blood, as shown by the increase of residual nitrogen and by the relative decrease in the amount of urea nitrogen. They give no intimation of the stage or stages of the disease in the cases studied.

There are many other laboratory tests which are either not fully developed or for other reasons are impracticable; such as the Haemolytic test of Crile; the Tamanouchi test; the Ranschoff decepted test. Still another test that should be mentioned in passing considered by Sahli as of practicable value is the digestibility of catgut by the cancer stomach, even though h c l is absent. As to the X-ray, Case and White Leonard have given the most satisfactory reports, but do not as yet seem willing to accept the responsibility of making a positive diagnosis. Case advises

that a suspicious case be X-rayed in four or five weeks, which seems to us rather a long period of delay at such a vital time to the patient. White says, "our mistakes" have been errors of commission, rather than errors of "omission." i. e. the X-ray is more positive in determining the absence of carcinoma than its presence.

In diagnosis there has not been found a definite sign which will tell us of the presence of cancer of the inner organs, and the state which we have reached is not one at which our satisfaction lies in retrospect, but we feel a keen interest in peering into the future at the work which is to come, and the great service which will soon be accomplished by systematic education of the public and the profession.

In conclusion (briefly) from our study of the very extensive literature on this subject, we believe 1st, that cancer of the stomach is not diagnosed early enough to determine the presence of a possible preceding ulcer. The absence of an ulcer surface in an advanced cancer proves nothing. 2nd: That ulcer is a physiological question in the beginning, while primarily cancer is a pathological one. 3rd: Every ulcer that does not prove to be a simple ulcer, in a reasonable time, under proper management and competent observations should be considered a malignant condition. 4th: At present our knowledge points to the hereditary tendency plus an irritation as the cause. 5th: That the X-ray alone is of little value in early diagnosis; that the laboratory finding must be carefully interpreted. 6th: That further studies in blood chemistry and of the ductless glands may furnish valuable data to be added to our diagnostic forces for the more ready recognition of this otherwise fatal thing, and finally we urge for the future the closest co-operation between the Internist and Surgeon in the study of this subject, with an earnest attempt to obtain a completed picture of a given case in order to avoid the "single-track" road which has so often introduced difficulties into the cancer problem.

**DOCTOR: SEE YOUR SECRETARY. PAY YOUR 1922 DUES.**



## CASE SELECTION FOR TUBERCULIN THERAPY.\*

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The early history of tuberculin might well be termed a tragedy since the denouement disclosed disastrous results to all dramatis personae; doctor, tuberculin and patient. The profession of 1890, believing that Koch had discovered the long-desired specific for consumption, gave tuberculin in large doses and at short intervals to the tubercular of every type and at every stage. This procedure, particularly in well advanced cases, we now know, hastened rather than retarded the inevitable disaster. Medical men became skeptical of the use of tuberculin and following Virchow's report, based on autopsy findings, that tuberculin caused mobilization of tubercle bacilli and dissemination of the disease, this skepticism developed into open opposition. It was soon apparent to all that tuberculin was not a drug to be used indiscriminately. Experience has shown and time has verified the fact that there are types and stages of tuberculosis when this medicine if administered is a "Cup of Hemlock" to the patient; the same factors have demonstrated that there are other types and stages of this disease in which it may be the "Elixir of Life" to the afflicted one. For I have no hesitancy in stating that while tuberculin may be useless or positively harmful in cases, it is of decided value in others. Do we not find in current literature such expressions as "Tuberculin has to its credit victories that are more striking than can be accredited to any other form of treatment"; "Tuberculin when judiciously given in carefully selected cases as an adjunct to the hygienic treatment has a definite therapeutic value." Of the many details observed by these men who have been able to make such favorable reports of the use of it, none is more important than my theme, the rational selection of cases suitable for the therapeutic exhibition of tuberculin.

To bear in mind the following elementary facts will enable us more intelligently to accept this case and reject the other case for the use of this agent.

(1) No toxin, either endogenous or exogenous, of the tubercle bacillus has been demonstrated and the increase in the blood of opsonins, agglutinins and precipitins, following tuberculin injections, is an increased tolerance to tuberculin and not an immunity to tuberculosis; therefore tuberculin per se is not a cure for tuberculosis. (2) The protein substance of the tubercle bacillus is the potent principle

of tuberculin. Efforts to remove the reaction producing or so-called deleterious substance of tuberculin and retain the immunizing principle have proven futile; therefore since most varieties of tuberculin contain this protein no one of them possesses immunizing bodies not found in most of the other varieties. (3) In cases of multiple tubercular lesions some of the involved areas are at a different stage of development from others; therefore the quantity of tuberculin required to produce the desired reaction at one site may produce too intense or too slight reaction at another.

To be specific, I consider the following clinical types unsuited for tuberculin therapy:-

(1) Those whose dietetic-hygienic habits cannot be controlled, or of whom an accurate temperature record cannot be kept. Some members of our profession give tuberculin to cases of this class believing that they are doing the best possible under the circumstances. I commend the motive but condemn the practice.

(2) Acute, rapidly declining cases, or cases in whom the maximum daily temperature is 100 or above.

(3) Advanced cases with fever and emaciation.

(4) Cases with severe complications as nephritis, myocarditis, etc.

Tuberculin will usually be of benefit in the following classes:

(1) Cases under close observation of whom a temperature record may be kept and necessary hours of rest observed.

(2) Those with lesions of lungs, glands, bone, eye, larynx, genito-urinary tract etc, not sufficiently active to produce constitutional symptoms.

(3) Those who have improved up to a certain point under the usual regime of diet, rest, fresh air and graduated exercises, but will not advance beyond that point. Tuberculin is often the necessary "Whip" in this class of cases.

(4) Those without fever but in whom some condition, as hemorrhage, renders inadvisable the graduated exercises necessary for auto-inoculation.

(5) While the presence of multiple lesions does not necessarily contraindicate the use of tuberculin, the case with a single lesion is more apt to react favorably.

## Discussion.

*Dr. Horace T. Price, Tulsa:* After all this lapse of time there is still a great difference of opinion as to the virtue of tuberculin. All agree that its merit is shown best in those early cases which are being benefited by hygienic

\*Read before section in General Medicine, 29th Annual Meeting, McAlester, May 18, 1921.

treatment, and, in some few that have not continued as rapid improvement as they should show. Therefore, it is said, seemingly with much justice, that tuberculin is useless. It is certainly dangerous unless used with much caution and close watching of the individual case, and not with fever, acute disease of other type or hemorrhage.

Pottenger, however, with his great experience, feels safe in using it in any stage probably with his own reservations. But after the very early stage it is customary to find a beginning and an advanced lesion side by side. Tuberculin may help the early but do damage to the advanced, so that most careful observation is essential. Only small doses should be used, not necessarily to extremes, increasing so as to avoid reaction.

In pulmonary tuberculosis I feel that the majority of physicians would do well by their patients to omit tuberculin, though I grant that it is a ready means of better keeping in touch with them, and to that extent, if no further, is valuable. It seems to be of considerable benefit in tuberculous disease of other parts of the body, excepting the acute miliary form.

Fishberg seems much opposed to its use.

*Dr. Lea A. Riely, Oklahoma City:* The use of tuberculin is like a two-edge sword. When properly used it is most satisfactory as a therapeutic agent. Like everything else which is lauded so high, when the pendulum swings back it is let down with a thud and we condemn it too hard. Had it not been for Dr. Trudeau who was constant in his use of tuberculin after Koch first brought it out we might not have been using it this day as we are. It has to be carefully handled or you overwhelm the system with a toxine which is already overburdened. You can produce rales in a chronic chest or you can increase pain in a tuberculous kidney by the administering of too big a dose of tuberculin. If properly administered it is certainly a wonderful help in our tubercular therapeutic armamentarium. I usually use O.T. beginning with one or two minims and working up, trying not to get a reaction.

*Dr. McCarley, Closing:* In presenting this brief paper I realize that I am treading on dangerous ground. I would not leave the impression that I think tuberculin is the cure for tuberculosis. The point I wish to make is this, that I believe if we refuse to consider tuberculin as a therapeutic agent we are, in certain carefully selected cases, not using every possible measure that will be helpful in arresting the progress of the disease. In no case should it be allowed to supersede the observance of such proven essentials as rest, diet, fresh air and graduated exercises.

## MORE HOSPITALS AND BETTER HOSPITALS.\*

DR. C. M. ROSSER  
Dallas, Texas

The time has passed when judicial minded and well informed people are prejudiced against hospitals, but there are certain requirements which ought to be made, and certain standards which they should attain before public confidence should be individually awarded.

Time was when a house containing rooms, more or less, one of which was set aside and labeled "operating room" could be considered a hospital, lacking only that one or more legalized practitioners of medicine utilized it as a place for the care and treatment of sick and injured persons. Of course it was necessary that some one should be observed about the premises in the nurses uniform, but to question her training and general fitness for the responsible duties assumed would be almost equal in importance to an inquiry regarding the medical officers training and capacity. It was a hospital simply because sick people were assembled there for treatment, and the only purpose served in many instances was to advertise the doctor, or doctors, connected therewith, and to render his services more convenient to him.

In some instances, in order that there should be an added dignity and an apparent reason for confidence on the part of the public, a board of Trustees or Directors would be designated, but as a rule their attention to the workings of the institution were as inconsequential as the contemplated remuneration. But just as privately owned and operated medical colleges disappeared under competent censorship to make room for such institutions as could furnish University guaranties, just so the clandestine hospital is no longer tolerable. I do not intimate nor hold that privately owned and operated hospitals are not frequently of a most commendable standard. I know of a number which, to my personal knowledge, are conducted in a scientific and highly satisfactory manner. There are some points in their favor in reality when supervised as they ought to be and in charge of the sort of physicians and surgeons whose abilities and whose characters can stand the test of scrutiny and investigation. There is a privacy possible to such institutions which appeals to many people and there is no criticism which should attach to a private hospital so conducted. We have, however, intended to discuss hospitals in general and the obligation which the public owes in their support.

\*Read at 3rd Annual Meeting Oklahoma State Hospital Ass'n, McAlester, May 18, 1921.

Why Hospitals at all? In order that the sick and otherwise physically afflicted citizens of the communities may have surgical care of the highest order at a minimum expense.

How can this be accomplished? By the selection of a suitable site and the erection of a building or buildings properly arranged and equipped with laboratories indispensable in the diagnosing of diseases, operating rooms with modern supplies, rooms and wards so graduated in price that men of large and small means may be equally satisfied. These are the prerequisites, but nothing has been really accomplished for such an enterprise until properly educated men of superior conscience group themselves as attendants upon the medical and surgical service, and by consecrated devotion to their calling utilize the building and equipment for their better purposes.

How can the safest and most scientific services be rendered. By the association of experts in the various lines, candid and capable in both theory and application, in other words a "closed staff" properly organized and properly functioning. This means that frequent meetings wherein the failures as well as successes are discussed, and a lesson drawn from every notable incident. It means that the best good of the patient is the consideration, and that, if, for any reason, individual medical men, nurses or employees cannot co-operate in the way encouraging to progress, they shall be supplanted.

But while this is ideal it is not the only way and in many instances the surroundings not the most practical way to supply the largest benefits to the people. The "open staff" is immediately most popular, and because it permits individual choice on the part of prospective patients, it is the most workable policy in the absence of adequate hospital facilities, the population being considered.

What the medical profession insists upon, and what the public should demand is that all the safeguards possible shall be thrown about all such institutions inviting patronage, for the hospital is a public necessity and, therefore, is of public concern and subject to public inquiry.

Men do not ask jewelers to mend their watches on the front porch or on the kitchen table; they leave them with the jeweler where his workshop is equipped for that delicate and careful attention which they require. When our automobiles are injured or otherwise out of repair, we do not send for the mechanic to bring his tools and repair them in the private garage or back yard but understanding the importance of place and opportunity, the automobile goes where the mechanic is sup-

plied with all those things necessary to make his services successful.

I ought to speak of the necessity of endowments. No hospital can enjoy that superior atmosphere which its fullest usefulness can create except it be in position to render free service to the poor. But this is not possible unless provisions are made outside the ordinary income. Here then appears the most attractive opportunity for the philanthropist to exercise his humanitarian inclinations, and to prepare himself to hear on that last final day commonly called the judgment "As often as you have done it unto the least of these, you have done it unto me".

### DIFFERENTIAL DIAGNOSIS OF PITYRIASIS ROSEA AND MACULAR-SYPHILIDE.

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Oklahoma City, Okla.

Associate to Department of Dermatology, State University Medical School.

It is not the intention of the essayist to bring out anything new about either Pityriasis Rosea or Syphilis. He was prompted to write a short paper more as a reminder that a mistake can be made, than for the purpose of special enlightenment upon the subject.

A few cases have come to our attention in the recent past in which such mistakes have been made and the sufferer of Pityriasis caused to undergo considerable unpleasant anti-syphilitic therapy, quite unnecessarily. I trust that this fact alone is sufficient to justify a brief description of the eruptions of Pityriasis Rosea and the Syphilides which they may closely resemble.

Pityriasis Rosea is a disease which manifests itself upon the skin in the form of macular, maculo-papular, maculo-carcinate or papulo-circinate eruptions. These eruptions distribute themselves quite symmetrically with a distinct predilection to the trunk and upper portions of the extremities. The lateral portions of the trunk are likely to contain a greater abundance of the lesions than the central portion, either in front or back, and in the typical case the most of the eruption on the trunk is below the level of the nipples. It is not unusual to find the lesions above the nipples and even in the supra and infra-clavicular regions, and in exceptional instances on the lower portion of the neck, but the essayist has never seen the eruption on the face nor forehead. Of the upper extremities the inner sides of the arms and the deltoid areas are most involved, and the eruption sometimes extends to the junction of the middle and lower third of the forearm, but it rarely extends below the wrist.

In color the eruptions vary from a very pale



pink or fawn color to quite a bright pink and may not be distinctly raised above the level of the healthy skin, and they range in size from that of a pinhead to that of a silver dollar. The larger ones tend to fade from a pink to a light brown or tan in the center, forming circinate lesions. The border of the lesions are sharply outlined.

The surfaces of the macular patches are covered with very fine branny scales.

The shape of the lesions are round or oval with irregular outlines, and sometimes the long axis of the oval shaped ones correspond to the direction of the ribs.

The lesions are in no way painful, and itching varies from an occasional tingle to quite a severe pruritis. Most all patients describe more or less itching when the body is heated from exercise or when there is considerable friction upon the skin. One point about the eruption of Pityriasis Rosea that is quite interesting is that the onset consists of a single large patch situated on the lateral portion of the trunk preceding the main eruption, from a few days to a week or more.

The cause of the disease is unknown. It is more prevalent in young adults and women, but no age or sex is immune.

Enlargement of the lymphatic glands is not a constant symptom but is very frequently demonstrable especially the anterior cervical axillary and inguinal. I have not seen the epitrochlears enlarged.

In our experience syphilodermata are not so often mistaken for Pityriasis Rosea as Pityriasis Rosea is for the maculo-papular syphilodermata. The distinction between the two diseases is as a rule not difficult to make, however, when the case of pityriasis is very mildly inflammatory and associated with considerable adenopathy and the lesions have not developed into their usual full characteristics, the mistake can and is easily made, even by those quite accustomed to seeing the syphilodermata. If the case is watched for a few days it will soon develop the distinguishing points. Namely: the bright pink lesions lacking in the usual purplish tinge of the syphilodermata and having sharply defined borders with a fine branny scale, while in Syphilis the color fades more gradually into the surrounding skin and the lesion is more likely to have a shiny surface. The lesion will not be so prominent to the touch as the lesion of Syphilis and the distribution of Pityriasis so completely avoiding the hands, palms, soles and forehead which are so likely to be affected in Syphilis, and finally the absence of the other symptoms and signs of Syphilis, such as the mucous membrane involvement, history of the chancre, etc., and the negative Wassermann

The mistake is usually made by not giving the case the amount of study that it should have. Pityriasis Rosea is a self-limited disease, lasting as a rule from three to eight weeks with exceptions in some cases, which last over several months. It is obvious that if one was not careful about checking his case up with Wassermann tests he would give considerable treatment thinking the secondary eruption was quite obstinate in the long attacks of Pityriasis Rosea. And if the case happened to clear up in a week or two as is often the case, the doctor would mistake the coincidental clearing of the eruption for the expected results of his treatment, and thus go on with several months of treatment perfectly contented with his results.

Inasmuch as mistakes of this kind are being made it behooves all of us to verify our diagnosis and be reasonably sure that we are right before we begin anti-syphilitic treatment.

In reviewing the subject before writing the paper, the following authors were respectfully consulted: Sutton, Ormsby, Crocker, Stelwagon, Hyde, Walker, Pusey, Sequeria and Highman.

#### Discussion.

*Dr. C. H. Ball, Tulsa:* Mr. Chairman—Dr. Roland, in his very excellent paper, indirectly emphasizes the laxity and negligence often demonstrated in making a thorough examination of the patient. The doctor who can make a snapshot diagnosis of every condition seen the first time has not yet been born, and it is only after careful study, sometimes over considerable periods, that a correct, positive and definite interpretation of the pathological factors concerned can be correlated into facts. If your patient is not of sufficient intelligence to cooperate with you in arriving at a correct diagnosis, my opinion is that you are justified in giving him a placebo until time enough has elapsed to permit you to investigate his case from every angle.

In Tulsa I have also had the experience of disagreeing with several physicians who called pityriasis rosea macular syphilis.

A Tulsa physician had his attack of pityriasis rosea called scabies by a local doctor, and was being thoroughly anointed with sulphur ointment, with a resultant dermatitis medicamentosa when I saw him.

The color of the eruption of pityriasis rosea more nearly resembles a salmon pink, in contradistinction to the fawn color of pityriasis versicolor or the ham or copper color of the macular syphilid.

The size and shape of the lesions is another distinguishing characteristic. In syphilis the lesions for each individual are all of one size,

either a large or small macule, while in pityriasis rosea there is absolutely no uniformity, all sizes, from a pinhead to the size of a dollar, may intermingle.

Many authorities group pityriasis rosea, urticaris and erythema multiforme together and call them the trinity of urticarial diseases, and the fact that they all seem to be influenced by intestinal antiseptics gives a basis for the assertions.

Most of the lesions of pityriasis rosea also show a clearing center, with often a slightly elevated periphery, and pathologically are merely an inflammatory reaction, while macular or papular syphilis lesions are uniform in appearance over the entire area, and are caused by a clumping together of the spirochetes, and, being to a certain extent foreign bodies, by their presence in the skin cause not only an inflammatory reaction, but also tissue proliferation, which gives them a feeling of firmness and consistency.

Dr. Roland's paper is an appeal for more careful investigation, to the end that correct diagnosis will result, and thereby elevate the practice of medicine to a more scientific standard. We should all profit by his admonitions.

#### PROCEEDINGS OF UNIVERSITY HOSPITAL CLINICAL SOCIETY

Oklahoma City

November 4, 1921

**Dr. L. M. Sackett:** *Ectopic Pregnancy.*

White female age 24 years. Chief complaint, pain in the lower abdomen.

Present Illness: A little over four weeks ago patient had an attack of cramp like pain in lower abdomen; this was accompanied by nausea and vomiting. The pain was marked across lower abdomen and in lumbar region of the back. She had none previous to this attack. At the same time she had a slight discharge from vagina, white and not foul smelling. A week later she had another attack of similar cramp like pains which she said were like mild labor pains. During this attack blood flowed from the vagina; in it was a solid substance like a piece of flesh. She felt relieved after the bleeding stopped. The patient states that she used several douches later. A short time after that she began to have a feeling of soreness and pain in lower abdomen becoming more severe until finally she came to the hospital. She says that she had missed two periods up to the first attack and thinks she is pregnant; she has not flowed since.

Past history: Has never had a foul discharge. Husband had Neisserian infection

three years ago. Married eight years. Three children, last one six years ago. No miscarriages.

Vaginal Examination: Cervix just within vagina, points downward and forward. A tumor mass that occupies the entire pelvic cavity posterior and to three finger breadths above the pubic bone anterior. This mass is very tender and seems to be a part of or continuous with the uterus. There is a definite mass in the cul de sac that has the feel of pus tubes.

Laboratory findings: W. B. C.'s 9,350 with 71% polymorphonuclears. R.B.C.'s 2,840,000 Hemoglobin 53%. Urine negative.

Possible diagnoses in the case were considered to be (1) pregnancy (2) tubo-ovarian condition (3) pelvic abscess (4) pelvic cellulitis or (5) incomplete abortion. The question of ectopic pregnancy was presented and discarded. Later vaginal examination showed hard firm mass in the cul de sac which was suspected to be a localized pelvic abscess (The patient was running septic sort of temperature, rapid pulse and was septic in appearance, and had localized pain). Five days after entrance into hospital cul de sac puncture was done under gas oxygen anaesthesia. Large amount of serosanguinous fluid with odor of pus escaped. A mass was still palpated high in the right tubo ovarian region. We were afraid to puncture this blindly so rubber drain tube was fixed in the cul de sac with the hope that probably pus localized higher up would point and escape thru the drain. Improvement was light. A rounded slightly tender mass developed above the symphysis and excessive backache continued. Eleven days later cul de sac was again opened with the escape of some old dark blood and clots, still having a distinct pus odor. The mass above the symphysis did not disappear. Accordingly laparotomy was done and a large, well walled off and protected mass was felt and seen outside of the abdominal peritoneum. There was no blood nor clots in the abdominal cavity. Going thru this mass and into the right tubo-ovarian region, some old dark clots were extracted and a three months old fetus presented itself. There was some bleeding from this region and it was packed with gauze and the patient returned to bed in considerable shock. The drain has now been removed and it is expected that the patient will go on to uneventful recovery but with the probability of future pelvic surgery being necessary.

#### Discussion.

The proper definition of the term ectopic pregnancy is pregnancy outside of the uterus and not confined to tubal structure as many believe. It is divided into types as (1) Tubal (2) Abdominal (3) Ovarian. Another classification is the following: (1) Ectopic gesta-

tion with negligible hemorrhage (2) Moderate hemorrhage (3) Severe hemorrhage (4) Fatal hemorrhage. The importance of a reliable history is of absolute importance. Here it is that the attending physician may overlook this serious condition. In the history written on the chart in this case the following important statement is not made which was obtained from the patient after she was convalescing, namely, "I had a sensation of wanting to faint and fell by the roadside and it was some time before I could get on my feet and return home".

The diagnosis of ectopic pregnancy is not always easy to make. Grad of New York states that 42% are incorrectly diagnosed; Graves puts it at 50%. Out of group (1) namely those with negligible hemorrhage, only 25% were diagnosed correctly. In Grad's group of fifty cases, 74% had negligible hemorrhage.

In the acute type of ectopic pregnancy, rupture usually takes place from the upper border of the tube into the abdominal space. When the ova is forced out the ostium of the tube or the tube ruptures on its lower side, the condition is oftener subacute or chronic. Hemorrhage may fill the cul de sac or the pelvic cavity outside of the peritoneum or may occur between the layers of the broad ligament making a mass of variable size. Many of these latter recover without operation.

Thorn operated only 6 out of 187. The 181 were treated in bed with only a 0.6% mortality. The acute type of course require immediate surgical attention. Schumann of Jefferson states that shock is no contra indication to surgery in this variety.

In operating in any case and as the condition of the patient permits the question of how extensive the operation is to be should be carefully considered. Smith shows 33% have normal pregnancies later, 15% repeat ectopics. Post operative adhesions following an incomplete operation, pain and discomfort thereafter, impairment of organic functions, repeated abnormal pregnancies, make us consider hysterectomy. On the other hand, age of the patient, social conditions, desire for children, etc lead us to be more conservative and attempt to save the pelvic generative organs.

**Dr. A. B. Chase:** *Chyliform Ascites.*

White male age 67 yrs, admitted 10-19-21.

History: Chief complaint (1) Excessive enlargement of abdomen (2) Hernia, L. Inguinal with pain (3) Loss of weight 30 or 40 lbs in one year. Influenza Feb 1921, severe cough and fever lasting about three weeks.

Present Illness: Doctor said hernia occurring about then was caused by the severe cough. In 1908 had "swamp fever", jaundice 2 months,

fever with chills, "hemorrhages from kidneys", and pain in right side. Progressive increase in size of abdomen beginning April 1921 to July 1921; varies in size responds to laxatives. Enlargement always "silent and painless". Similar swelling with jaundice 1917. Never tapped. In present attack skin cleared 2 months ago. Painful ascitids in hernial sac now. Two hemorrhages from bowels last 8 weeks; frequent tarry stools before admission to hospital. Spleen has been enlarged for 12 to 15 years. Edema legs last 3 weeks.

Past history: Typhoid at 27 yrs. Pneumonia three times since 1908. Denies venereal. Bitten by tarantula one yr. ago followed by ulcers "to the bone".

Physical Examination: General appearance: Anemia marked has dehydration and cachexia. Enlarged superior epigastric and superficial mammary veins (collateral circulation). Lungs negative. Heart: ape x beat 3d i.c.s., otherwise neg. Blood pressure 118-88. Blood vessels slightly sclerotic. Circumference abdomen at navel 47 inches. Fluctuation wave in abdomen. Scrotum size of adults skull. Extremities negative. Paracentesis on 10-20-21. Fluid 5000 cc, milky in appearance; 10-21-21 9000 cc; two days later 11000 cc of fluid. Nov. 4, 1921, 11000 cc same kind of fluid.

Specimen of the ascitic fluid shows the following:

Color: Yellowish white-murky-well emulsified.

Odor -- none detected.

Sediment-- in bottom of flask gives reddish tinge of red blood cells.

Microscopic-- Many red blood cells, few white cells, some debris similar to urates, non-cellular. Fat globules not seen. Sudan 111 stain negative. Stained specimen reveals a considerable number of polymorphonuclear cells, more lymphocytes and endothelial cells, and a few large cells undergoing mitosis

Creamy layer not discernible.

Specific gravity 1010.

Total solids, 2.5%, Total protein 1.44%

Fat--Quantitative tests negative.

Quantitative tests negative.

Cholesterol negative. Lecithin and globulin present.

Putrefaction not present after three days at room temperature.

Sodium chloride content 1.22%

Blood counts on the following dates were: October 19th, - R B C -2,960,000; Index 1.1; W B C 10,000; PMNs. 85%  
October 21st - R B C 3,170,000; Index 1.1; W B C 6,700; - PMNs 76%; Hgb 69%  
November 3rd - R B C 3,100,000; Index 0.9; W B C 6,200; PMNs. 77%; Hgb 58%



Some polychromophilia and stippled cells. No parasites found in the blood smears. Routine urinalysis negative. P.S.P. - 1st hour 28%, -- 2nd hour, 5%, -- Total 33%.

Gastric analysis: Total acid 84.4, Free acid 41.4. No Oppler-Boas bacilli. Sugar tolerance test. Fasting blood sugar 100 mgms per 100 cc. One hour after ingestion 100 gms glucose, 143 mgms per 100 cc; hour and a half after, 160 mgms. Basal Metabolism, normal.

Following paracentesis examination of the abdomen reveals very thin abdominal wall. Gastric and intestinal peristalsis waves present. Descent of an enlarged spleen is visible. Palpation reveals enlarged spleen. Liver cannot be felt at costal margin. No palpable masses found in abdomen or rectum.

**Conclusions:** The conditions which suggest themselves as factors in the case are: Tuberculosis, Carcinoma, and conditions of the liver. The physical and laboratory findings and rate of refilling of abdomen are not in accordance with tuberculosis or malignant cyst of the abdomen.

The sugar tolerance curve strongly suggests malignancy. Up to the present time, no local evidence of malignancy has been found. The size of the liver and the evidence of disturbance of the portal circulation does not enable us to eliminate cirrhosis of the liver. The patient is still under observation in the hospital. The general condition of the patient is improved.

#### PROCEEDINGS OF OKLAHOMA CITY CLINIC, ROUND TABLE, WESLEY HOSPITAL

**Dr. J. C. Macdonald:** *Case of Partial Obstruction of Duct (Wharton's) of Submaxillary Glands.*

Patient female. Age 35. Married. Referred to clinic because of enlarged gland right side of neck. Patient first noticed enlarged gland about 3 months ago. At that time it was thought that enlarged glands were due to either infection from tonsils or teeth. Tonsils were removed and teeth X-rayed, treated by dentist without apparent benefit as far as gland was concerned.

Patient states that this gland becomes quite painful and enlarged to twice its ordinary size as soon as she eats something, especially preserves. This swelling remains for about two hours, is quite painful and then returns to ordinary size without further discomfort until the next meal.

Physical examination shows a smooth tumor mass about the size of a pigeon egg in right side of neck under the lower maxilla. Lower border smooth, upper border - not palpable. No special tenderness. No other glandular en-

largement elsewhere. Tonsillar fossae clean. Teeth, some filled, lower molars.

Because the tumor mass corresponded to the sub-maxillary gland, we decided to have patient eat some candy and observe what effect salivation had on the tumor mass. Immediately the tumor mass became twice as large as before, was quite tender to touch and painful to patient. This practically proved to us that the salivary glands were involved and from the anatomical location it should be the sub-maxillary. During the process of eating the secretion of the gland was stimulated and due to partial obstruction, excretion thru duct did not occur rapidly enough to empty it, consequently gland became swollen.

These obstructions to the ducts of the parotid or submaxillary glands are usually due to obstruction from a calculus.

This patient will enter the hospital in the morning when an attempt will be made to probe the duct of this gland to determine whether a calculus is present, or the obstruction is due to a stricture.

The probing of the duct is extremely difficult because of the very small caliber and the tortuous course. If this fails, one has to consider the advisability of removing the gland to overcome this condition.

**Dr. M. E. Stout:** *Death from Carbuncle.*

Mr. B. - Case No. .... Age 67.

Has always been a strong healthy man, never had any serious illness and thought he was well preserved for a man of his age. Has had several small boils over his back during the summer. A small carbuncle was excised from his shoulder one week ago, and upon the presentation he had one about the size of my hand.

Otherwise his physical findings were negative but the urinalysis showed a gross amount of sugar and the CO-2 retention in blood plasma was 66%. This obliged us to offer an immediate prognosis that the patient was not likely to live very many days, which saved us the embarrassment of the unjust condemnation of having a patient die from what is in the minds of the people so simple a thing as a carbuncle, without being warned.

The carbuncle was excised. There was no shock and the patient was in good condition on the following day, but the friends and relatives were again told that he could not live long. He remained in good condition throughout that day and the following one, but on the morning of the third day he began to show signs of stupor and soon lapsed into a coma, expiring before night.

This case is reported for no other reason than to impress the importance of a urinalysis in every case of carbuncle for if sugar is present in

a very appreciable quantity the prognosis is grave, especially is this true if there is also a marked blood retention of CO-2. They lapse into diabetic coma within a few days, in spite of all efforts to prevent it.

**Dr. A. L. Blesh:** *Case of Advanced Carcinoma of Breast - Radical Amputation followed by Lymphangitis of Arm.*

Case No. 6982. Lump in breast first noticed by patient six months ago. Growth has been rapid since observation but there has been but little pain.

It is important to emphasize the fact that cancer is not per se a painful disease, that when there is pain it is incidental and due to (a) infiltration of sensitive areas; (b) involvement of organs, the physiological functions of which it disturbs; (c) breaking down with ulcer formation. As a rule when any of these complications occur the disease is far advanced and incurable.

Physical examination is negative except for right breast the nipple of which is higher than the sound one and shows beginning retraction. Breast contains a fist-sized hard, irregular mass adherent to skin but not to chest. The axillary glands are in an advanced state of involvement.

Diagnosis, Carcinoma Right Breast, Advanced.

Treatment. Radical extirpation, Rodman incision, sent to laboratory for X-ray shower while open (X-ray sp. gap 9 inches. MA 5-5 min.)

Laboratory report microscopic examination of specimen from breast showed to be adeno carcinoma.

Post Operative History: Radium treatments were given regularly for four months. Six months later the patient returned complaining of a stinging burning pain accompanied by itching extending over shoulder and arm. The skin presented a thickened, leathery appearance.

Diagnosis - Lymphangitis due to obstruction of lymph return which in turn is caused by the extensive axillary gland dissection. There is no obstruction to venous return.

Remarks - Lymphatic obstruction is the initial phase of elephantiasis. A collateral lymph circulation may in time be built about this obstruction. This is the only hope of a cure. Further operation except as a palliative measure is not to be considered. In that case it could offer only removal of redundant skin and subcutaneous tissue.

Cancer of the breast is so frequent that in common with other surgeons of repute our experience has been relatively large. This is the first complication of the lymphatic circula-

tion that we have had. We have seen a number of venous obstructions where advanced cases required extensive dissections of the axillary.

**Dr. D. D. Paulus:** *Case of Hypertension at the Menopause.*

Female - Age 41. Occupation housekeeper. Married. Family history negative. Had ordinary diseases of childhood with good recovery. Pneumonia at 13. Good recovery except that she has been more or less nervous and high strung since. Operated for Fibroid Tumor of the uterus 8 years ago with splendid results.

Menses started at 12. Always regular 28 day type, three or four days, moderate amount. Never has been pregnant. Last menstrual period February this year.

Present trouble started last March, with increasing nervousness, hot flashes, and increasing difficulty in hearing. The increasing difficulty in hearing has caused the patient considerable mental worry and anxiety. Otherwise feels well. Appetite good. Bowels, tendency to constipation. Occasional headache.

Physical examination shows temperature 98.6. Pulse 78. Blood pressure 170-100. Pupils equal and regular. Both react promptly to light and accommodation. Throat negative. Teeth lower molar absent, upper many filled. Ears examined by Dr. Macdonald who reports left ear drum retracted, light reflex absent, chronic catarrhal Otitis Media. Chest negative. Heart no evidence of hypertrophy. No murmurs. 2nd aortic fairly loud and snappy. Glandular system is negative. Liver and spleen not palpable. Abdomen and extremities negative. Pelvic examination negative. Reflexes OK. Urine negative. Laboratory findings Wassermann negative.

The urine will be checked up from time to time to make sure no underlying chronic nephritis is present as a causative factor. She was advised to have teeth examined for apical abscesses.

In the management of Hypertension one should always try to find the causative factor and consider the Hypertension only a leading symptom. In this particular case we are dealing with a case of Hypertension at the menopause in a high strung nervous woman. First of all we want to make sure that no foci of infection is present such as teeth, tonsils, appendix, gall bladder etc. We also want to be sure to obtain free bowel drainage. If we can we want to change or rather to re-educate the patient's nervous system so that instead of dealing with a high strung nervous individual we shall deal with a patient of a more stable nervous condition. This we can secure by

cutting down or eliminating her social activities prolonged rest, especially emphasizing an after lunch nap of an hour or so.

In the Hypertension cases of a nervous type we can also secure good vasodilation by the use of bromides and thus secure a decrease in blood pressure in proportion to her nervous relaxation, whether this is secured by lessening nerve stimuli or sedating adrenal activity or by neither of these we do not know, but we do know that combined with rest it does the work. We shall also give her a prescription for a mixture of thyroid gland, corpus luteum and ovarian extract and expect that before many weeks she will be improved considerably as far as her nervousness is concerned and also her hot flashes. Her blood pressure will drop to the region indicated by the amount of vascular sclerosis and hypertrophy.

Concerning her difficulty in hearing I will leave that to the nose and throat man, whether it is due to Arterio sclerosis or to Chronic Catarrhal Otitis Media.

Regarding the prognosis of Hypertension cases where the blood pressure is above 180, a writer a few years ago in following up a large number of cases found that 85% of them were dead by the end of the second year.

## DOCTOR:

See

Your

Secretary.

Pay

Your

1922

Dues

# THE JOURNAL

OF THE

## Oklahoma State Medical Association

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Reprints of original articles will be supplied at actual cost, provided request for them is attached to manuscript or made in sufficient time before publication.

Articles sent this Journal for publication and all those read at the annual meetings of the State Association are the sole property of this Journal. The Journal relies on each individual contributor's strict adherence to this well-known rule of medical journalism. In the event an article sent this Journal for publication is published before appearance in the Journal, the manuscript will be returned to the writer.

Failure to receive the Journal should call for immediate notification of the editor, 508 Barnes Building, Muskogee, Okla.

Local news of possible interest to the medical profession, notes on removals, changes in address, deaths and weddings will be gratefully received.

Advertising of articles, drugs or compounds unapproved by the Council on Pharmacy of the A. M. A., will not be accepted.

Advertising rates will be supplied on application. It is suggested that wherever possible members of the State Association should patronize our advertisers in preference to others as a matter of fair reciprocity.

## EDITORIAL

### THE "GUARANTEED" SUBSCRIPTION LIST

A nationally known medical Journal accompanies its half page announcement, "January 100,000 copies GUARANTEED". To the last word we address ourselves. While we may be scoffed at much as a small boy attempting to stem the tide of battle with his simple sling, yet we cannot help injecting the mild suggestion, one which, if taken, will, we believe, settle the matter and place the minds of curious investigators interested in ascertaining, wherever possible, (and that is not as simple as it would at first appear), the actual number of names of the bona fide mailing list of a medical publication; the following brief procedure, which is simplicity itself, which will speak more eloquently than any number of GUARANTEES, and, we are sure, will leave a better taste in the business mouths concerned in knowing the facts, the process consisting of



(1st. counting the names rightfully belonging on the list (this means good faith elimination of complimentary, exchanges, copies to advertisers, etc.) (2nd) step over to the Notary Public, raise your hand and SWEAR, not GUARANTEE, that the circulation of "SO and SO Journal is . . . . .". This seems so simple to us compared with the unwieldy GUARANTEE business that there is hardly any possible comparison. It certainly compares rather highly, we should say, far outshadows any other method for convincing the space buyer WHO'S WHO in Medical Journalism. The only pitfall to this procedure (and it applies to all others with equal force), is that occasionally met *rari avis*, really sleek-methoded sly evador, once met in the writer's experience. When asked how he managed to show such an astounding subscription list in the face of actual facts to the contrary, answered "Every few months we mail out to an extra list of physicians that many copies". Asked why "every few months", "Well you see the Postal authorities will not permit you to send copies any oftener than that *unless they are paid subscribers*. We beseech you, drop that GUARANTEE business. No one takes it seriously.

#### OUR "YELLOW" JOURNALISM.

THE OKLAHOMA CITY TIMES, taken to task for not "printing the news" in connection with the salacious details of the Sonnanstine trial, wherein criminal operation was charged, rightly defends its position with the statement that there is "nothing constructive" in the case, nothing new, but an "old, pathetic, sordid incident that is being combatted by law and public conscience with increasing effect". The TIMES is correct, decent minded people are constantly being offended by the habit of a lurid press displaying with scare head fronts the slime and filth of the lowest elements of our corrupt day. The attitude of the press is very well set forth in its handling of the recent "Cancer Week" effort. With no "axe to grind", no individual to be "boosted", no particular clique or clan to be preferred over others, a silence of unexcusable proportions met the propaganda in many parts of the State. One of the largest cities of the state carried not a single line of this great, altruistic effort to help the helpless and unwary, but it had hashed up to its thousands of readers every atom of the Clara Hamon and "Fatty" Arbuckle cases. So goeth the day and the times. We are getting what we demand, no more, no less. The press is a faithful mirror of our public morals and public view on all questions. We are not proud of certain portions of ourselves.

#### VIRULENCY OF THE PRESENT SMALLPOX

That the present epidemic of smallpox is unusually virulent is the conclusion from reports from various centers where it exists. Observant practitioners have expected that rise in severity for many years. That the extreme mildness of the disease for the past twenty-five years has bred contempt for it as worthy of alarm is also well known, but that condition also deterred thousands from submitting to protective vaccination, so it is probable, that outside of those who saw army service, the percentage of unprotected among our people is higher than it has been in many decades. So mild had the disease become that the large majority of cases were virtually ignored, caused no sense of danger among either people or physicians. Not so with this one. There is genuine apprehension as to its danger and already a very large number of people have undergone vaccination, many of whom were never before so protected.

Perhaps this is a good opportunity to state the case for vaccination to those who are skeptical, those who are ignorant or prejudiced and those who have inordinate fear of vaccination. The most convincing example the physician may bring is the story of the Civil War as against that of the World War. The Civil War was accompanied by a frightful onslaught of smallpox and the mortality was very high, naturally the morbidity was likewise out of all proportion to the present day experiences. The disease was virtually nonexistent in the World War. We may state positively that successful vaccination is absolutely protective and preventive against the disease, that properly performed and the infection given sensible after treatment, it is nearly always harmless, that those immune by former vaccination may safely undergo revaccination, assured that no inconvenience will result if immunity still exists, and finally, that there is no other known protection.

#### THE FINE ART OF VACCINATION.

It is no wonder that vaccination is unpopular. This very simple little procedure and its results are trivial, only when performed with the idea clearly in the physician's mind that it holds unpleasant possibilities if carried out carelessly and inefficiently. Its simplicity is evidenced by the fact that no one is so unskilled but what he thinks he can properly perform vaccination. As a matter of fact there are a few well known rules, which if neglected are almost certain to bring a reward of unwarranted suffering and inconvenience. These rules are:

Clean your patient's arm with some anti-

septic, preferably alcohol, clean off your alcohol unless you wish to destroy your vaccine and render your work useless.

Scarify properly, not all over the arm and down into the muscle. The scarification should not be "cross", but a few longitudinal scratches barely through the epidermis, sufficient to secure serum, but not blood, which may of itself destroy vaccine, so if you do have blood present, gently sponge it off with a sterile swab, then apply the virus, gently rubbing it into the abraded surface in order not to attract blood. Allow the lymph to dry, after which a small sterile gauze should be applied.

It should be remembered that small abraded surfaces are adequate. Larger ones, if sloughing unfortunately occurs, only producing larger sloughs. There is ample authority that two or more points of application render the patient more quickly and strongly immune.

Up to this point the procedure is simple enough, but a real indictment, good, strong and sufficient is brought against our profession for the inexcusable after treatment or lack of it accorded the patient. You now have an infection to deal with and it should be given the same respect and treatment as any other infection. Unless this is remembered and carried out, and more often it is not, small disasters in the way of weeks of suffering, great sloughs, swollen arms, variable unpleasant reactions will be the reward.

Immediately upon evidence that a "take" has occurred, you may be assured your object has been attained, and that by effective, prompt care, most of the unpleasantness may be avoided.

The wound should be carefully cleansed. If fever occurs, and it often does, it should have the same attention as any other rise of temperature; purgation, antipyretics and rest. As for the wound; its treatment should be symptomatic. Many cases deserve, and should have a wide restful splint to the arm, or it placed in a sling so long as unusual inflammation exists. At first the infection should have large, continuous moist antiseptic dressings, one of the favorites being Ochsner's alcohol 1, boric acid, saturated solution 5 parts. This should be applied under a dressing of oiled silk, cellosilk or some other good impervious covering, as retentive of both heat and moisture. At all times during this inflammatory stage, when the arm is swollen, hot and painful, entire rest of the muscles should be insisted upon. The large moist dressings are usually quickly effective, reducing the matter to a simple sore which may be then treated as any other, by application of the old fashioned balsam peru. i. oleum ricini 7 parts and later by ordinary dusting powders.

This after care is indicated in nearly all cases. It is proper and good practice in contra distinction to the universal neglect we have hitherto accorded this small part of our work. Vaccination should not have to be written about in this day, but observations with many thousands of cases and memory of the inexcusable, gross carelessness with which it has been largely practiced demands that it be noted in justice to the thousands of our people who have lately or will soon undergo vaccination.

### CONCERNING UNION LABOR ACTIVITIES.

THE JOURNAL acknowledges receipt of a letter from Mr. Edgar Fenton, President of the Oklahoma State Federation of Labor, which, it is regretted cannot have full reproduction due to lack of space, but will have its salient features published for the information of our profession.

Mr. Fenton states, that it is evident the writer of the Editorial in the October Journal was misinformed, at least in some of the matters referred to in the editorial. That, as a matter of fact, representatives of both the Chiropractics and the Medical profession sought to have resolutions supporting their respective claims passed by the Shawnee meeting, but that as such activities "do not properly come within the scope of activities of a labor organization etc.", no action was taken. "No action has ever been taken nor has any statement on this question ever been made by this Federation." "Individual members may have made such statements, but the Federation can not, nor does it seek to control the views of members of affiliated organizations in such matters."

Mr. Fenton also states that the resolution proposing to dictate the writing of prescriptions was overwhelmingly rejected. He also states: "The writer has a high regard for the medical profession, many of his closest personal friends being members of that profession. We choose to forget the incompetents and fakes who have masqueraded under the name of 'doctor' and to remember the great service that the profession has rendered to humanity."

We take pleasure in stating Mr. Fenton's ideas, and assure him and all others that the information was sown broadcast over the State just at the time it was calculated to produce the most effect that the Federation had gone on record as supporting the Chiropractics. Of course, we now very clearly see that that was only one of the many little pieces of shifty misrepresentation evolved by those worthies to mislead the voter and by despicable dishonesty gain a vantage which might otherwise be lost. It is another warning to the profession of med-

icine to discount every and any statement emanating from the cult; to insist on absolute proof and verification of every detail as to any statement or claim they may make. That they are wholly untrustworthy, parade as truth and fact, untruth and fiction, the informed have long known, what we wish is for the rank and file to understand their principles and practices.

Mr. Fenton is advised that no person was authorized, directly or indirectly to take the matter up with the organization; so, we have here another example of "Free-lancing" on the part of some officious, meddling Medic, probably, actuated by good intentions, but unauthorized nevertheless—Thompson, Secretary-Editor.

### THE SOUTHERN MEDICAL LOSES

Dr. Seale Harris, Secretary-Editor-Treasurer of the Southern Medical Association has resigned. His friends have known for a long time that the work involved as Secretary has seriously interfered with his private work, to which he was greatly attached, notwithstanding that he undertook to pilot the Southern during most of its years of childhood to its present stalwart state among medical organizations and a moments reflection testifies to the great success following his efforts, the organization standing second in the country and holds in its membership men of the stamp who will never permit it to decrease in prestige and usefulness. It will always stand as a monument to the untiring efforts of Dr. Harris. The thousands of members wish him every success and no honor we may confer upon him in the future will be too great to be his.

### LORENZ, THE PROPHET WITH HONOR.

History repeats itself in the present attitude of the press of the country in giving a sensational quirk to the visit of Dr. Lorenz, the Viennese orthopaedic surgeon. Many of us are not so young as to have forgotten a previous visit to this country of the famous surgeon. Then as now, his stock in trade was the fulsome adulation of a press eager to laud his every act and quite as eager to distort the attitude of the American surgeons who did not take kindly to the surgical spread sown broadcast daily to people who by no possibility could appreciate the fine points involved, but who on the contrary, had false hopes raised in the minds of thousands of helpless sufferers, who expected to have their diseases cured in what seemed the miraculous manner attaching to the Lolita Armour case. The public promptly forgot then, as they have now, the great ser-

vices rendered by the American orthopaedist. They forgot to give them credit for the rendition of unpaid service to the thousands of our crippled children, and, because they stand for some little decencies in the matter of ethics, condemning instinctively the very questionable and dangerously useless methods used to herald the visit of Dr. Lorenz. No one questions his ability, but they do question what virtually amounts to the antics of a Charlatan. The public should know, though they never will, that the same criticism would be brought against the greatest of American surgeons, in fact, they should know that the station held by greatness makes their lapses more inexcusable.

There is also some serious question as to the motives attaching to this call. "Love for my Dear American friends" is laudable; it is difficult of questioning too, but some facts are very well known to American orthopaedists who have visited the Viennese Clinic, which, if made public would at least warrant one in having his own opinions on that score. The great difficulty in having the public appreciate the principles involved in the position of the surgeons holding aloof from Lorenz is very apparent to the ethical American, but, the clay in which the ordinary mortal is cast simply will not permit him to see things from the super technical standpoint of ethics we are supposed to adhere to. One significant fact stands out in this however, which we should at all times remember; that is the readiness of the rabble to question the purest motives if they spring from a physician. It is apparent here as it is in every matter of controversy where the medical profession is party of interest. It is strange that the law of the land permits any person to represent himself, if he elects to do so. We never see him doing that. Permitted by the same law to practice medicine upon himself, he plunges into the control of the most dangerous affair, oblivious to the sorry spectacle he presents, and, on opportunities such as this, he attempts to set up a code of behaviour for the physician as well. Our critics of the press should be advised before the thing is over, just how far an American orthopaedist would get in the attempt to hold a Clinic in Vienna, or anywhere else in Europe for that matter. "Over there" they were very glad to have the American doctor when there was real work to do; his skill controlled and curbed epidemics, equipped and executed every phase of hospital work; beseeched to save their dying on all hands, not one of them today would be permitted to enter private practice without passing most stringent examinations, but of course our great dailies are not aware of that situation.



### Editorial Notes—Personal and General

#### **DOCTOR: You Must Pay Your Dues Before February 1, 1922. Otherwise Your Secretary Will Have To Remit \$6.00 On Your Account.**

Dr. C. H. Day of Ranger, Texas has located in Pawhuska.

Dr. and Mrs. J. T. Antony, Lawton, attended the American Legion Convention, Kansas City.

Oklahoma State Medical Association will hold its next annual meeting at Oklahoma City, May 16-17-18, 1922.

Dr. J. H. Moore, formerly a specialist of St. Louis in eye, ear, nose and throat work, has located in Hobart.

Dr. A. L. Stocks, Muskogee, attended the Chicago meeting December 7-10th, of Society of North American Radiologists.

Dr. P. H. Medearis, Tahlequah, has returned from a trip to the clinics of Chicago where he spent five weeks in special work.

Dr. L. E. Emanuel, Chickasha, has been appointed Chairman of the State Americanization Commission of the American Legion.

Dr. T. B. Hinson, Enid, visited Washington in November where he was one of a class of 125 to receive the honorary 33rd. degree of Masonry.

Jefferson County Society elected the following officers for 1922: President, Dr. W. T. Andreskowski, Ryan, Secretary-Treasurer, Dr. L. L. Wade, Ryan.

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Bartlesville barbers, cooks, waiters, and similar employees contacting with the public must hereafter possess a certificate of health, if a recently adopted ordinance stands the test of legality.

Drs. E. O. Barker and H. W. Larkin, Guthrie, appeared in court recently to answer charges of malpractice. They heard nothing except the remarks of the plaintiff's attorneys dismissing the case. It was said the case would be refiled.

Dr. Walter Hardy, Ardmore, had the unique experience of visiting the Hot Springs Southern Medical Meeting via his own airplane. He has been using the plane recently in a number of instances where time was an important element.

Alfalfa County Medical Society elected for 1922 the following officers: Pres. Z. J. Clark; secretary-treasurer, James Stevenson, Cherokee; Censors: M. T. Evans, Aline; T. A. Rhodes, Cherokee; E. C. Lindlum, Carmen and Delegate H. A. Lile, Cherokee.

Dr. and Mrs. V. A. Wood, Blackwell, and their interesting family were "featured" recently in a story in the Daily Oklahoman; of their eight children, six have graduated from the State University, while the youngest is now a second year student in the

Drs. Moorman and Balyeat, Oklahoma City, announce dissolution of their previously existing partnership. Dr. Balyeat will enter general practice, Dr. Moorman will continue specializing in internal medicine with especial reference to tuberculosis and its problems.

Dr. D. M. Randel, Okmulgee, was the victim of a contemptible scrub who totally destroyed two new casings just applied to his car. The vandals cut them to pieces

causing a loss of \$130.00. This was considered a Halloween prank, as a matter of fact it was a contemptible crime.

Dr. Claude Thompson, Muskogee, "took the count" recently when a backing automobile kissed the doctor's fender, stopping his car so suddenly that the doctor "kissed" his steering wheel. Results: one loosened set of front teeth, several lacerations of the face, one set of distorted neck and shoulder.

December 12th. Muskogee County elected officers as follows: President, F. E. Waterfield; Secretary-Treasurer, A. L. Stocks; censor I. B. Oldham. The society, in response to its invitation, received from Dr. C. F. Burford, St. Louis, Urologist, an acceptance. He will visit Muskogee and read a paper some time during January.

#### **DOCTOR: You Must Pay Your Dues Before February 1, 1922. Otherwise Your Secretary Will Have To Remit \$6.00 On Your Account.**

The Southern Medical Association by resolution stepped aside for the pleasant duty of sending Woodrow Wilson a message felicitating him upon his recovery and ability to participate in the Armistice Day Ceremonies, congratulating him upon his great humanitarian efforts. Mr. Wilson answered with a cordial message of appreciation of the sentiments expressed in the remembrance.

Dr. S. R. Cunningham, Oklahoma City, recently exhibited cogent proof of his ability as a strong orator. During an address at the "Father and Son" banquet recently held at the Y.M.C.A., as an acknowledgment of his force all the lights suddenly ceased functioning, reminding the fathers too, of their past, when instead of electricity, pine knots and kerosene were the staple standbys.

Oklahoma County Bonds were recently voted for the construction of a tuberculosis hospital. Indicative of the sentiments of voters in this, our most enlightened center, is the fact that of several other propositions, among which of great importance was an issue for the badly needed water improvement situation; the hospital bonds were the only ones voted; all others went down in disastrous defeat.

Oklahoma County is assured a County Hospital with special arrangements for the care of the tuberculous according to the verdict of voters of that county. Dr. C. E. Barker, very active in pushing to successful conclusion the plans for the hospital, and Drs. L. J. Moorman and J. T. Martin are on the board of Governors or control. Dr. Clarence E. Lee has been selected as superintendent of the hospital.

Drs. Walter Hardy and A. G. Cowles, Ardmore, recently declared in an interview for an Ardmore daily that the ravages of the present "brew" offered the Oklahoma thirsty were tragic and frightful; that insanity, blindness, wrecked nervous systems and death were a sure aftermath; that those guilty of manufacturing and selling the stuff deserved life sentences and those who drank it, the observation of skilled alienists. Selah, we fully concur.

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Drs. W. J. Jolly and R. M. Shaw, Oklahoma City, are late rivals in the Oklahoma City press: in the friendliest spirit, of course, they relate their wide past experience as obstetricians. Dr. Jolly said he stopped counting at the 3,000 mark, Dr. Shaw got tired at the 2,000 figure. Dr. Jolly's experience recalls lack of anesthetics, the many diverse cases encountered from the simplest to those demanding Cesarean Section, several of which he has performed.

**Woodward County Society** is energetically keeping pace with the ambitious program outlined some months ago and put in operation early in the Fall. November 9th their meeting offered a surgical clinic in the morning with operative work at the Woodward Hospital; a hountiful repast at one o'clock was served by the ladies of the First Christian Church. A "movie" of five reels demonstrating Werrheims work was next. Physicians from many surrounding counties attended the meeting.

**Okmulgee** prepared to take the most drastic action to curd the spread of smallpox, saw all its efforts set at naught by issuance of a temporary injunction prohibiting the authorities to comandeer and take over for temporary use, the buildings of the Okmulgee County Fair Association, the only ones possibly available, it is said. The injunction was granted upon request of the President of the Association. The buildings were taken over on the advice of the State's Attorney General, Prince Freeling, who declared the emergency justified the action.

**Ottawa County Society** elected officers for 1922 as follows: President, Drs. D. L. Connell, Pitcher; first vice-pres., F. L. Wormington, Miami, second vice-pres., R. H. Harper, Afton; third vice-pres., H. K. Miller, Fairland; Censor, M. M. DeArman, Miami; Secretary-Treasurer, G. Pinnell, Miami.

At the meeting smallpox was the bone of contention and discussion. Dr. Pinnell makes the remarkable statement that up to date Ottawa County shows a death rate of 100% of the cases, indeed a remarkable condition considering the previous mildness of the disease.

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"Bonuses", "Adjusted" and all other types of compensation, Hospitals, all on paper, have filled the papers of Oklahoma for many dreary months until we are heartily tired of the talk without tangible action. Every town, regardless of its fitness from the standpoint of location, population, presence or absence of able medical men, has tossed its chapeau into the ring, perfectly willing to undertake the management of the hospital, provided it is erected, equipped and maintained at the expense of the others. It is our opinion, without desire to be charged with harboring the idea of dictation of the matter, that the town which has not already provided adequate hospital facilities for its civilian needs is open to the suspicion of inability to provide a home for this proposed institution; possibly unable, also, to provide the highly skilled, medical and surgical technicians, absolutely inseparable from the proposed undertaking if it is to perform the functions intended. Service to the needy.

**Okmulgee County** announces the program for December 12th as follows: Community Hall, Henryetta. Toastmaster, W. B. Pigg, Okmulgee, and most naturally Pigg perpetrates some of his poetry anent the occasion.

"After a hearty meal and smoke  
Better attention you can lend,  
The scientific program to note  
And to Annual Election attend."

Pigg is nothing if not poetical. "Menstruation and Ovulation Following Operation", M. V. Stanley, discussed by W. C. Vernon. "Endocervicitis", Frank D. Howell, discussed by T. J. Lynch. "The Mitral Valve and its Lesions", I. D. Conn, Morris, discussed by I. W. Bollinger, Henryetta, which will also include showing of clinical cases. "Report of Committee for Control of Cancer" will be heard. The committee — Drs. Pigg, Howell, Breese Miner and Nelson. A reading of a questionnaire pertaining to the "After Effect of Warfare Gases" will be had. Annual election of officers.

Dr. J. C. Mahr, Oklahoma City, State Director, Interdepartmental Hygiene work for Oklahoma will be present and explain the Oklahoma Venereal Disease Control Law.

Dr. Caulk lost no time in succinctly and interestingly presenting a subject which has and no doubt will continue to offer the greatest pitfalls to the careless, unwary and negligent physician. It is regrettable the very class of physicians who would profit most by a clear understanding of the importance of genito-urinary problems in diagnosis and treatment of a mass of pathologic conditions were conspicuous, as they always are, by their absence. The experiences encountered by Dr. Caulk over a wide field of work were brought to view of his hearers in such manner as to make a lasting impression, his story of months of suffering, diagnosed as "malaria", that ever present and obliging standby of the inefficient Oklahoma physician, shown to be a prostatic infection amenable to the simplest measures applied with intelligent appreciation of the conditions; was only one of probably a score of diagnostic tragedies which we shall be doomed to see forever probably or until men make it a serious business to get at the bottom of urological problems. The meeting brought out a crowd of Tulsa physicians and several from adjoining cities.

**Tulsa County Society** meeting November 14th heard a paper from Dr. J. Winter Brown on "Eclampsia", discussed by Dr. Osborn. Dr. R. W. Sherwood presented a case of a child 22 months old with history of perfect health until August when it developed a partial paralysis of the left lower extremity, and which was diagnosed as scurvy by a pediatrician. The diagnosis of Dr. Sherwood of Infantile Paralysis was concurred in by all who discussed the case.

**Meeting of November 28th.** Aside from circulation of a petition seeking the signatures to a proposal from the Tulsa Society to the City of Tulsa, just now formulating a milk ordinance having for its object clear definition of a grade of milk standardized and of essential constituents to meet the needs of infants etc., and which would prohibit fraudulent claims as to milk not having such merits, and which had been rejected for inclusion in the ordinance by its framers, the feature of the evening was a most interesting talk by Dr. John R. Caulk, St. Louis Urologist, illustrated by original pictures and slides from his own work on the diagnosis, etc., of various kidney and bladder conditions as well as prostatic and seminal vesical involvements.

**Tulsa County-Meeting** of December 12th. Meetings will hereafter be held in the Chamber of Commerce Rooms. There will be no meeting during the Christmas holidays. Secretary directed to notify the public through the newspapers that travellers passing Missouri State lines were required to produce certificate of successful vaccination. Thirty-five dollars accumulated in the Charity Fund was directed to be paid to the Salvation Army.

Annual election of officers resulted as follows: President-elect, Dr. R. W. Dunlap; vice-pres., W. W. Beesley; Secretary-treasurer, C. S. Summers; Censor, N. W. Mayginn. Delegates: Drs. Beesley, Cook, Pigford, Mayginn, Clinton, Butler, Wall. The alternates are: Drs. Laws, Broken Arrow; H. T. Price; Woods; Springer; Henderson; Presson and Summers. 69 members and one visitor were present.

**DOCTOR: You Must Pay Your Dues Before February 1, 1922. Otherwise Your Secretary Will Have To Remit \$6.00 On Your Account.**

**Dr. C. A. Johnson**, Wilson, Post Commander American Legion, in an address to the members upon his return delivered an address from which the following excerpts are gems worthy of reproduction: "I have just returned from the greatest convention of the greatest organization on earth — that is a broad statement but I make it without fear of contradiction, for the American Legion was founded and is based on the most unselfish and altruistic of all foundations, that of SERVICE. This service means primarily that the whole machinery of the Legion is constantly in motion, first for the betterment of the conditions of our disabled and down and out 'Buddies', and second,



this service is for our government and for future generations in its teaching of 100% Americanism. I would that every true American could have attended this convention. They would have returned with loftier conceptions of the principles of the Legion and nobler ideals to live for and war for in the future. It was not the fact that we moved and mingled with the most popular idols of the world today, but the fact that these noble and distinguished men were there for no other purpose than the humblest of all the delegates, that of amelioration of almost unbearable conditions for our 'Buddies' and our country, that made this the greatest convention of present times. Our distinguished 'Buddies' proved themselves to be real 'Buddies' in every sense of the word. The perfect Pershing, the famous Foch, the dapper Diaz, the gruff Jacques, the handsome Beatty, all showed themselves to be genial, charming men, gentlemen and 'Buddies' all. Sectional feeling was cast aside in every thing except the resolution condemning George Harvey, the American Ambassador to England who stated that America entered the War from selfish motives, but only for a moment. It was quickly subdued by the insurmountable feeling of comradeship and consideration for the best interests of our country.

We would like to reproduce, verbatim, Dr. Johnson's entire address. It contains much upon which he should be congratulated. Throughout it bears evidence of the deepest feelings of patriotism.

### DOCTOR: You Must Pay Your Dues Before February 1, 1922. Otherwise Your Secretary Will Have To Remit \$6.00 On Your Account.

Kentucky State Board Of Health and the United States Public Health Service will hold a National Health Exposition in Louisville, Ky., February 1 to 9, 1922. Facts concerning the meeting are stated as follows: 60,000 square feet in the Jefferson County Armory will be necessary to accommodate the exposition. Participating to the success will be the Health Department of Louisville, the University of Louisville, the public school system, various local, state and national health agencies; and exhibits in hospitalization, nursing, dentistry, medicine and pharmacy are included in the scheme. During the time the annual conference of city and county health officers, Kentucky Public Health Association and other public health meetings will be held in connection. The United States Public Health Service will conduct an Institute, the program offering Roseneau of Harvard; Dr. Josephine Baker, Director Department Child Hygiene, New York City; Dr. Wm. A. Evans, former Health Officer of Chicago and the most distinguished public health editor in America; Geo. T. Palmer, President Illinois Tuberculosis Ass'n.; Frederick R. Green, Secretary Council on Health and Public Instruction, A.M.A.; Dr. Valeria H. Parker, Director Interdepartmental Board of Social Hygiene; Dr. John H. Stokes, distinguished syphilographer of the Mayo Clinic; Dr. Frankwood Williams, Director National Ass'n. of Mental Hygiene; Dr. W. S. Rankin, State Health Officer of North Carolina; Dr. John Dill Robertson, Health Officer of Chicago; Dr. John R. McDowell, Director of Health, Lakes Division, The Red Cross; Dr. John R. McMullen, U. S. Public Health Service and Miss Frances Brink, Director National Organization for Public Health Nursing. Dr. A. I. McCormack, Louisville, is chairman of the Board of Directors of the Exposition, whose name attached to any movement has always spelled success. The Exposition should especially attract public health officers, epidemiologists, hygienists, public health nurses and every person interested in increasing longevity and making life happier and longer. The various organizations, through their officers will leave nothing undone to make of this one of the greatest meetings of its kind ever held. Louisville and her people are known the world over for their outstanding hospitality, which is based upon sincere feelings of kindness and that fine desire to make a host and hostess not to be forgotten.

### Abstracts, Observations from Current Medical Literature

#### OLD OS CALCIS FRACTURES

Fred. J. Cotton, M. D.

*Annals of Surgery, Vol. LXII, No. 3.*

He introduced the subject by stating that Os Calcis fractures are of interest because they give so large a percentage of cripples and because these cripples are strong men as a rule in youth or vigorous middle age.

He claims that only the cases where there is very little or no displacement, is recovery good. More than one-half of cases are partly disabled and handicapped in their work. Total disability for real work seems to be the fate of something like one-third to one-half of the cases.

The cases run curiously similar as a rule in their main features.

(1) The Calcis is short from front to back.  
(4) The bone is flattened on the sole, and deviates outward.

(3) Spurs on the planter face of the Calcis are not uncommon.

(4) There is an outward broadening due to the shoving outward of peroneal plate of bone, and to bone-growth behind it has been a source of trouble.

A great factor in the disability is that the external malleolus impinges in some way on this growth of bone. Loss of some part of the lateral motion is constant, and the limit of motion is painful.

To repair these conditions he states:

1st. That heel not be touched except when combined with displacement.

2nd. Outward deviation requires Gleich operation which consists of a cross section of the calcis done behind the posterior joint of the Os Calcis with a thin chisel.

3rd. Spurs are to be removed.

4th & 5th. Are taken care of by special operation which the author has devised.

Incision curved down and forward beneath the external malleolus. Strip up and lay forward and upward a flap including the peroneal tendons in their sheath, and turn up with them the periosteum and with it the Cortical layer of bone.

Then clear away excess bone, deep below Cortical level, leaving a saucer like crater of bones.

Manipulate until all movements are free. Close the flap, and apply cast in normal relaxed position.

A foot plate may be necessary for a short time after the operation. After four weeks allow weight bearing to begin.

He quotes a great many successful cases and one failure.

Earl D. McBride, M.D. Oklahoma City.

#### UN-UNITED FRACTURES

Alonzo Myers, Charlotte, N. C.

Myers states that we have at last arrived at a satisfactory method in the autoplasmic repair of bone, but he says that operative treatment in delayed union is to be avoided except as a last resort. Nature can do more for the bone than the surgeon, and until nature proves she can do nothing more, the surgeon should stay out. When all external mechanical devices such as massage, hydrotherapy, active and passive exercise, have been exhausted and there still remains un-united fracture, it must be treated by open surgery.

All metal devices, Lanes plates, nails, screws, clamps and all foreign bodies in fractures are a failure and prevent rather than produce union.

Auto plastic graft is resistant to infection. It absorbs or becomes an integral part of the bone itself.

He mentions the Albee inlay. The Dowel peg or intramedullary splint and the Chutro graft, expressing himself as favoring the intramedullary splint on account of less likelihood of infection and no foreign substance to absorb



such as catgut or tendon sutures and he names four essentials for success.

1. We must have aseptic operative wound.
2. A live transplant from the same individual, preferably with periosteum.
3. Actual contact between graft and bone.
4. Perfect and complete immobilization.

M. E. STOUT.

## MISCELLANEOUS

### THE SLANDERER

The very name invokes loathing. Though more or less in human form, this degenerate remnant of the silurian age is the most contemptible of creatures. The scandal-monger is disliked, the liar is despised, but the slanderer is loathed. Using falsehoods or facts that are distorted as some would juggle statistics, the slanderer spreads a most subtle poison, that blasts lives and reputations. Slander can not be controlled any more than you can stop a lie, once it has gained credence. Compared with the social diseases, it is the greatest evil of our age. The slanderer is more dangerous and despicable than those misguided enemies of society who use bombs and poison secretly.

Whenever you discover a slanderer posing as an honorable member of our profession, let your conscience be your guide but be sure you do your full duty.

M. L. S. B. A. R. Y., *Editorial in the Southern California Practitioner.*

### NEW LABORATORIES FOR ABBOTT'S

A substantial group of eight concrete buildings in North Chicago looms as evidence of the growth that is said to follow true service.

When the war cut off the import of medicinal chemicals used quite generally by physicians in this country, The Abbott Laboratories were among the first to provide for the urgent home demands. Such drugs as Barbitol, Procains and Cinchophen were produced in this period by its chemists under license from the Federal Trade Commission. Since that time there has been a continuously increasing demand for these and other high grade synthetics, under the Abbott label, necessitating an enlargement of manufacturing space and facilities.

Along with this, the research department of the firm is being enlarged and valuable new agents for the physician's use are being developed.

The executive offices of The Abbott Laboratories will be maintained at the present address, 4739-53 Ravenswood Avenue, Chicago.

### THIS GENTLEMAN WOULD "REGULATE" OUR MEDICAL BOARD'S AFFAIRS

Cumberland, Md., November 2nd, 1921.

Secretary, State Board of Medical Examiners, Shawnee, Oklahoma

Dear Doctor: I am in receipt of reciprocal blank for which I thank you. My object in desiring to locate in your state is due to my health. I am an advertising physician. All claims which I make in my advertising are truthful; all advertisements are clean, and can be read by anyone without giving offence. I think you will agree with me when I say that a physician who conducts his business in a legal manner should have the same consideration shown him as is shown to those who, under

the guise of being ethical, have their friends do their advertising for them.

I am quite sure that the form of reciprocal blank your state is using is clearly illegal, and it only needs someone to step forward and test same. I realize this is an expensive procedure and, were I successful, it would let down the bars for those who are not desirable.

I am registered by examination in Illinois, Virginia and Maryland. If your board refuses to issue a reciprocal license, I shall be compelled to hire a physician registered in your state and, as a natural sequence, my advertising, owing to the additional expense I will be forced to incur, will have to be much stronger. I would much prefer my relations with the board to be amicable.

Trusting you will submit this letter to the board and thanking you for your courtesy, I am, Yours very truly, C. I. Woolford, M.D.  
24 N. Mechanic Street.

P.S.: My specialty is Chronic Diseases. I do not treat venereal diseases.

November 9, 1921.

Dr. C. I. Woolford, 24 N. Mechanic St., Cumberland, Md.

Dear Doctor: I have yours of the 2nd and in reply will say that I appreciate your frankness. In reply thereto I must be equally frank in saying that I do not respect your legal opinion regarding the blanks being put out by us. I am equally frank in saying that I do not see how you are going to evade the law by hiring a regular physician in this State to work with you. Unless the Board reverses its former attitude, there is no way by which an advertising physician may secure license in Oklahoma. The Board has had a great deal of experience in the past with physicians who seek to evade the law and feels that it has been responsible in protecting Oklahoma in many cases. It is not the policy of the Board at this time to let up in any of its efforts nor is the Board likely to be intimidated by the letter to which I am now replying.

With personal regards, I beg to remain, Yours truly, J. M. Byrum.

Sec'y State Board of Medical Examiners.

## NEW BOOKS

### THE SURGICAL CLINICS OF NORTH AMERICA (The Mayo Number)

The Surgical Clinics of North America (Issued serially, one number every other month) Volume I Number 5 (The Mayo Clinic Number) 296 pages, with 163 illustrations. Per clinic year: February 1921 to December 1921. Paper \$12.00 net, Cloth \$16.00 net. Philadelphia and London: W. B. Saunders Company.

# PRACTICAL MEDICINE SERIES-VOLUME 111. EYE, EAR, NOSE AND THROAT

By Casey A. Wood, C.M., M.D., D.C.L.; Albert H. Andrews, M.D., and George E. Schambaugh, M.D. Cloth, illustrated, 392 pages, 1921. Price this volume \$1.75; for the series of 8 volumes covering the various specialties in medicine, \$12.00. This work is of unusual interest in that it notes articles and innovations brought about by the Great War, which in its diverse activities touched and affected every department of human endeavor. The Year Book Publishers, 304 South Dearborn, Chicago.

## PRACTICAL MEDICINE SERIES-VOLUME 1

General Medicine. By Frank Billings, M.S., M.D., Burrell O. Raulston, A.B., M.D. Cloth, illustrated, 630 pages; price \$2.50, 1921. The Year Book Publishers, 304 South Dearborn St., Chicago.

## THE EXPECTANT MOTHER AND HER CHILD

By Charles D. F. O'Hern, M.D., Tulsa, Oklahoma. This artistically prepared little booklet is a message to the expectant mother. It is full of sound advice and common sense. Prepared by Dr. O'Hern, apparently for private circulation to his clientele, it would be well for many of our profession to have a glimpse of it and adopt the procedures advised. That obstetrics, to a large extent, is still surrounded by the "witch-craft" aftermath, prejudices and so-called mysteries, which are not mysteries at all, on the contrary easily explainable; is too painfully evident to observers, and the brunt of the results fall upon the defenseless, apprehensive little mother, always surrounded by a set of scandal-mongering, sensation bearing tell-tales in the form of women, ever ready to depict the "terrible time Mrs. So and So had etc." It is time this foolishness stopped, and this message prepared by Dr. O'Hern is one of the best means at the hands of the physician extant. Hygiene of the pre-delivery days is well stated and advised, as is that to be followed immediately preceding, during and after delivery. Considerable attention is accorded to the important elements of the dietary and complete suggestions for the household needs of both mother and child are given. The language is terse, amply sufficient and the text leaves no obscurity in the mind of the reader.

While it is not stated, no doubt copies of the volume may be had on application to Dr. O'Hern. It is worth the while of the busy physician to see the message as prepared. Mid-West Printing Co., 420 S. Boston, Tulsa.

## PRACTICAL MEDICINE SERIES

Pediatrics, Volume 4. By Isaac A. Abt, M.D., Professor of Pediatrics, Northwestern University Medical School, Attending Physician, Michael Reese Hospital, with the collaboration of Johanna Heumann, M.D. Cloth, comprising 189 pages of the volume.

## ORTHOPEDIC SURGERY

Orthopedic Surgery. By Edwin W. Ryerson, M.D., Associate Professor of Surgery (Orthopedic), Rush Medical College; Professor of Orthopedic Surgery, Chicago Polyclinic etc. etc.; with the collaboration of Robert O. Ritter, M.D., Associate Attending Orthopedic Surgeon, Children's Memorial Hospital; illustrated cloth 189 pages, total pages 306, Price \$1.75. The Year Book Publishers, 304 South Dearborn, Chicago.

## 1920 COLLECTED PAPERS OF THE MAYO CLINIC, ROCHESTER, MINN.

1920 Collected Papers of the Mayo Clinic, Rochester, Minn. Octavo of 1392 pages, 446 illustrations. Philadelphia and London: W. B. Saunders Company. Cloth, \$12.00 net.

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## NOTICE

**To Ex-Medical Officers of the Army, Navy or Public Health Service. Commissioned From Oklahoma.**

For several years the undersigned, believing that some permanent recording should be made of the struggles and evolutionary epochs attaching to the medical profession of Oklahoma, accumulated, from time to time, such material as was believed to be of possible use in that connection. The sudden catastrophe of the World War called into the various Army, Navy and Public Health Service more than 500 of our profession from Oklahoma, and probably an equal number who gave their service in various capacities in assisting the State in mobilizing its man power for that struggle. Nowhere, not yet even in the offices of the Surgeons' General of the above services, does there exist any sort of compilation recording the service our profession gave the Nation, so far as is known to the writer. This and many other pressing considerations prompts the attempt to undertake such compilation with the hope that it will correctly state the record, perpetuate it as its importance demands. The work proposes to note every activity of our profession, schools, hospitals, official accomplishments, in fact every thing properly of worth and interest, it is hoped will be included eventually. To do this presupposes a task of unlimited magnitude, so, the co-operation of every one lessens the task to the extent of the cooperation.

It is requested that every commissioned medical officer of any of the above mentioned services mail at once his name and address to the undersigned in order that they be furnished with a blank for necessary data. Your cooperation in this will insure success of the undertaking.

Sincerely, Dr. Claude A. Thompson. Muskogee, Okla.







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